



The American GARDENER®

The Magazine of the American Horticultural Society

November / December 2016

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Weeds You Can Eat

Clumping Bamboos

Holding Beds as
Backstage Gardens

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BY CAROLE OTTESEN

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Photograph by Josh McCullough

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NOTES FROM RIVER FARM

AS THE WEATHER turns colder, I find myself in a contemplative mood. I have been pondering the questions of why we garden and what this interest in cultivating plants says about us. Of course there are probably as many answers to these questions as there are gardeners, but if I had to generalize, I would guess that the most common responses would fall into two camps: one relating to various personal benefits and the other to the “greater good.”

So, perhaps you garden because you simply find it fun and relaxing, or for the freshness, flavor, and nutrition of homegrown food. You might also garden to contribute to a greener, healthier world through creating pollinator habitat or planting trees. Maybe it’s become a fulfilling livelihood. What else would you add?

I believe that all gardeners—no matter why they garden—are optimistic people. Hand in hand with this optimism is an inherent passion, anticipation, and curiosity about the future. What does the next season hold? How will next year’s bloom or harvest compare to this year’s? What hue will that flower be when the bud opens?

This horticultural optimism and vision often spurs us on an unending quest to stretch the limits of our gardens. So we pore over the flood of seed and plant catalogs showing up in the mail or regularly haunt garden centers. How many of you are going to try something new in your garden next year? And how many of you are going to once again try a plant that surely will work *this time*?

The American Horticultural Society exists to support all the manifestations of this optimism. And if you’ll pardon the pun—we’re rooting for you! So let’s get to another issue of this magazine, packed with exciting plants to expand your palette, useful techniques to try, and fresh ideas to inspire even more optimism.

We have something a little different this time—an article informed by you, our members from across the country. A few issues ago, we asked you about how you use holding beds in your own gardens, and you had plenty to say! Veteran gardener and longtime contributor Linda Askey helped us corral your collective thoughts on the subject, while adding some of her own experiences. Along with being forever optimistic, we gardeners certainly love to share with one another.

That sharing nature also drives gardeners to apply their skills, knowledge, and horticultural zeal to improving their local communities. Sometimes it is by way of an organized effort such as the outstanding programs championed by our friends at America in Bloom (see page 10). Other times it may be a little more spontaneous and even clandestine. To get the lowdown on a burgeoning grassroots movement known as “guerrilla gardening,” check out the article by Patricia Taylor on page 24.

Plant-focused feature articles this time delve into well-behaved bamboos, gourmet weeds, and dainty daphnes prized for their powerfully fragrant blossoms. Whatever your interest, you’re bound to learn something new in this issue of *The American Gardener*.

On behalf of our AHS Board of Directors and staff, we offer our very best wishes to each of you for a joyful, healthy, and safe holiday season.

Tom Underwood
Executive Director



The American GARDENER

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The American Gardener (ISSN 1087-9978) is published bimonthly (January/February, March/April, May/June, July/August, September/October, November/December) by the American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308-1300, (703) 768-5700. Membership in the Society includes a subscription to *The American Gardener*. Annual dues are \$35; international dues are \$55. \$10 of annual dues goes toward magazine subscription. Periodicals postage paid at Alexandria, Virginia, and at additional mailing offices. Postmaster: Please send Form 3579 to *The American Gardener*, 7931 East Boulevard Drive, Alexandria, VA 22308-1300.

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

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Printed in the U.S.A.



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MEMBERS' FORUM



MORE WILDLIFE GARDENS NEEDED

As a retired florist with a great interest in gardening, I recently attended a meeting of the Louisville Nursery Association to hear Clyde Nutt, a Louisville beekeeper, give a talk. Nutt's suggestion to nursery owners was that they should encourage their clients—both commercial and individual homeowners—to consider including wildlife gardens for pollinators of all kinds. I think this is a great idea, and hope that the American Horticultural Society will also encourage this kind of effort.

*E. Ramsey Kraft
Masonic Home, Kentucky*

Editor's note We certainly do! The AHS is part of the National Pollinator Garden Network, which keeps a registry of pollinator gardens at www.millionpollinatorgardens.org. Add your garden today!

NO COMMON NAMES, PLEASE

In reading *The American Gardener*, it jolts me every time you highlight the common name of plants rather than their more identifiable Latin name. For instance, in March/April you ran an article titled "Give Pinks a Chance." *Pinks?* What are pinks? And in July/August you described plants in the "Architectural Annuals" article as "prince's feather" and "mountain garland." I've never heard of either one. Nor would a reader have been able to find either one by those names in a catalog. In both instances, you did give the Latin names, but as an afterthought. Why ever do you use "common" names for plants?

*Betty Stacey
McLean, Virginia*

A POX ON TAXONOMISTS

With all due respect to Carl Linnaeus—the Swedish botanist, physician, and zoologist who formalized the modern system of naming organisms we know as binomial nomenclature—the time has come for a revolution. Botanists, horticulturists, landscape architects/designers, and gardeners all over the world labor to memorize the scientific names of plants because they know that

common names are unreliable. But taxonomists won't leave well enough alone; apparently they have to justify their existence.

The article about aromatic asters in the September/October issue reminded me of my biggest pet peeve. Taxonomists have taken all the New World asters and changed their genera to ridiculous unpronounceable, unspellable, unmemorable names. I have always prided myself on my knowledge of botanical names, but this has gone too far. I personally refuse to use any of the new names, which include: *Aster breweri* (now *Eucephalus breweri*), *Aster divaricatus* (now *Eurybia divaricata*), *Aster novae-angliae* (now *Symphytotrichum novae-angliae*), and *Aster oblongifolium* (now *Symphytotrichum oblongifolia*).

Fellow plant enthusiasts unite! Refuse to let these self-serving scientists overcomplicate our lives.

*Gregory Carlson
Marshall, Virginia*

SWEET POTATO PESTS

I particularly enjoyed the article on sweet potatoes in the September/October issue. I would like to add one pest of sweet potatoes to the list. In my garden I have a terrible problem with voles. There's nothing more disheartening than to harvest a large sweet potato and discover half of it missing due to vole damage. I'd appreciate any suggestions readers have on how to prevent this problem.

*Lu Anne Copeland
Chesapeake, Virginia*

CLARIFICATION

An observant reader pointed out that in the "Homegrown Harvest" article on sweet potatoes (September/October), we initially correctly described them as tuberous roots, but then erroneously referred to them as "tubers" in later sections of the article.

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hosted by J. Dean Norton

GARDENS OF GENOA, THE ITALIAN RIVIERA & FLORENCE

September 5–14, 2017

hosted by Katy Moss Warner



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October 30–November 8, 2017

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November 8–10, 2017

hosted by Jane and George Diamantis

More information coming soon:

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A TOUR OF NEW ZEALAND**

January 2018

hosted by Panayoti Kelaidis

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

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WEBSITE: www.ahs.org The AHS website is a valuable source of information about the Society's programs and activities. Users must set up a username and password to access the member's-only sections.

News from the AHS

November / December 2016

PROGRAMS • EVENTS • ANNOUNCEMENTS

COALITION OF AMERICAN PLANT SOCIETIES MEETING

THE 2017 Coalition of American Plant Societies (CAPS) leadership conference will be held May 17 and 18 in Chicago, Illinois. **Ball Horticultural Company** will be hosting the sixth annual meeting of this alliance of national plant organizations, which is being organized jointly by the **American Dahlia Society** and the **American Horticultural Society**.

These meetings, held at different sites around the country each year, provide a forum for plant society representatives to network, discuss issues of mutual interest, attend educational sessions, and tour regional gardens. More information about the CAPS meeting will be available early next year.

UPCOMING TRIP TO CONNECTICUT FOR AHS PRESIDENT'S COUNCIL MEMBERS

AN ANTICIPATED annual event, the AHS President's Council Trip will be heading to the Litchfield Hills region of northwest Connecticut next year. From June 26 to 30, participants will enjoy tours of many exceptional private gardens and fascinat-



The trip will include tours to gardens like this one that exemplifies the charm of New England's architecture and landscapes.

ing specialty nurseries in and around the region, well-known for its rolling hills, bucolic scenery, and New England charm. Travelers will be based at the **Interlaken Inn** in Lakeville, a country inn and resort.

For this trip, the AHS is partnering with the **Garden Conservancy**, and the itinerary will include a visit to one of its preservation projects, the historic **Hollister House Garden** in Washington,

Connecticut. The Conservancy is also helping to coordinate visits to a number of notable private gardens that are otherwise only accessible through its annual Open Days program.

"Our annual President's Council trip is always a unique experience," says AHS Executive Director **Tom Underwood**. "Not only do we get to see and do things that are extraordinary, but the group also enjoys a special camaraderie that comes with shared interests and passion for the work of the AHS."

The itinerary is developing, but in addition to the Hollister House Garden, destinations include **White Flower Farms** nursery, **Broken Arrow** nursery, and the **O'Brien** nursery. The trip is an exclusive benefit of membership in the AHS President's Council and current members will receive invitations later this winter. To learn how to join the President's Council, e-mail development@ahs.org or visit www.ahs.org/ways-to-give/presidents-council.

News written by AHS Staff.



AHS NATIONAL EVENTS CALENDAR

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

DEC. 1–23. **Indoor Holiday Display at River Farm.** Alexandria, VA.
 DEC. 10. **Holiday Open House at River Farm.** Alexandria, VA.

2017

APR. 4–17. **Springtime in Japan: Inspiring Gardens & Landscapes.**
 AHS Travel Study Program.
 APR. 21 & 22. **Spring Garden Market.** River Farm, Alexandria, VA.
 APR. 22. **Great Gardens and Landscaping Symposium.**
 Woodstock, VT. (AHS partner event.)
 APR. 22–29. **Historic Garden Week in Virginia.**
 (AHS partner event.)
 APR. 29 & 30. **Colonial Williamsburg Garden Symposium.**
 Williamsburg, VA. (AHS partner event.)

A Fall Bounty of Persimmons



A bumper crop of Japanese persimmons (*Diospyros kaki*) adds seasonal color to River Farm's demonstration orchard in late fall. These low-growing deciduous trees are often weighed down by the bounteous yellowish-orange fruits that form on pollinated female trees. Fruits reach the peak of sweetness when nighttime temperatures dip to near freezing. A bowl of the fruits makes a wonderful fall table decoration before being eaten fresh or added to breads, pies, and jams.

Gifts of Note

In addition to vital support through membership dues, the American Horticultural Society relies on grants, bequests, and other gifts to support its programs. We would like to thank the following donors for gifts received between September 1 to October 31, 2016.

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Dr. Lolly Tai

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AHS NEWS SPECIAL: America In Bloom Awards for 2016

by Lynn Brinkley

FOR THE LAST 15 years, America In Bloom (AIB) has been inspiring cities across the United States to embrace the positive power of plants. Each year, this nonprofit hosts a friendly nationwide competition for communities of all sizes to vie for various awards related to their greening efforts. In early October, it held its annual symposium and awards ceremony in Arroyo Grande, California.

Earlier in the year, a team of AIB judges evaluated the competing communities on six criteria: overall impression, environmental awareness, urban forestry, landscaped areas, floral displays, and heritage preservation. Those garnering top ratings receive awards, but all of the participating communities are winners because they have taken steps to “become more welcome and vibrant places to live, work, and play,” says AIB Executive Director **Laura Kunkle**. (A partial list of this year’s award winners is shown in the box below. For a complete list, visit AIB’s website at www.americainbloom.org.)

Additionally, the symposium provides opportunities for participants to discuss successes and challenges within their communities. One factor that has had a greater impact in recent years is water availability and the tightening regulations on its use.



Fire-resistant landscaping is showcased in a demonstration garden in Arroyo Grande, California.

However, several AIB communities are proving that “beautiful landscapes with an emphasis on environmental stewardship are possible when faced with water restrictions,” says Kunkle. For example, this year’s symposium host city, Arroyo Grande, is in “a severe drought, yet that community blooms with beauty,” she notes. It even received the AIB award for Best Example of Water Wise Gardening this year.

Towns and cities of all sizes, college campuses, business districts, and other eligible communities are invited to register for the 2017 AIB competition by February 28, 2017. For more information, call (614) 453-0744 or visit www.americainbloom.org.

Lynn Brinkley is an editorial intern with The American Gardener.

Special Award Winners

- Most Impressive Pollinator Garden **Washington, MO**
- Most Successful Implementation of a New Project **Venice, FL**
- Most Striking Public Wall Mural **Henderson County, NC**
- Best Use of Local Bloom Committee Logo **Ironton, OH**
- Best Adaptive Reuse of an Historic Structure **Brewton, AL**
- Coolest Downtown **Holland, MI**
- Best Program for Engaging Young People **Catskill, NY**
- Best Example of Water Wise Gardening **Arroyo Grande, CA**
- Best Heritage Tree Program **Morro Bay, CA**
- Best Combination of Plants in Hanging Baskets **Newtown Square, PA**

Outstanding Achievement Awards

- Environmental Efforts **Holland, MI**
- Landscaped Areas **St. Charles, IL**
- Urban Forestry **Saratoga, CA**

- Floral Displays **Greenwood, SC**
- Community Involvement **Edmonston, MD**
- Heritage Preservation **Winter Park, FL**
- Overall Impression **Belpre, OH**

Population Category Award Winners

- Less than 3,000 **Castle Rock, WA**
- 3,000–5,000 **Lewisburg, WV**
- 5,000–10,000 **Logan, OH**
- 10,000–14,000 **Morro Bay, CA**
- 14,000–20,000 **Holliston, MA**
- 20,000–30,000 **Calabasas, CA**
- 30,000–50,000 **Midland, MI**
- More than 50,000 **Lexington, KY**
- Champions Category (Small Cities) **Gallipolis, OH**
- Champions Category (Mid-Size Cities) **Washington, MO**

AHS MEMBERS MAKING A DIFFERENCE: Mary Rose Ruffini

by Lynn Brinkley

MANY PEOPLE who garden can point to a parent or other family member who instilled a passion for plants in them at a young age. Mary Rose Ruffini can point to several, because she grew up surrounded by gardeners in Queens, New York. Her mother planted irises and spring bulbs while her father “grew great tomatoes, perennials, shrubs, and trees,” she says. Both sets of grandparents lived nearby and also gardened. Now she is a grandparent herself, eager to inspire “the next generation of green thumbs,” while serving her community as a Master Gardener and herbal ambassador.

GARDENING IN THE GOLDEN YEARS

Despite her lifelong interest in gardening, it wasn't until her semi-retirement from teaching in the late 1990s that Ruffini was able to really devote herself to it. In 2000, she decided to take a semester-long Master Gardener course through Cornell University in Ithaca, New York. That same year, she attended an herb symposium hosted by the Long Island Unit of the Herb Society of America (HSA). She so enjoyed the experience that she kept attending these annual gatherings, proudly noting she went to her 17th consecutive event earlier this year.

After completing her Master Gardener course, Ruffini began volunteering at public gardens in her area. “The gardens at the Suffolk County Farm and Education Center were my first choice,” she says, because she had once been based there while coordinating 4-H programs for Cornell's Cooperative Extension Service in the mid-1980s.

Ruffini also began visiting gardens whenever she could. In 2002, she visited the American Horticultural Society's

River Farm headquarters in Alexandria, Virginia, and has been a member ever since. She has explored gardens as far away as Hawaii and Wales. Wherever she goes, she finds new ideas to incorpo-



Mary Rose Ruffini (foreground) conducts an informational workshop at the Kunz Nursery in Port Jefferson Station, New York, with nurseryowner and fellow Herb Society of America member Carolyn Kunz-Zambraski.

rate into her Long Island garden. “The plantings, lighting, and sounds all evoke memories,” she says.

A PENCHANT FOR HERBS

Among her varied gardening interests, Ruffini found herself most drawn to herbs. In addition to regularly attending the herb symposia, she became increasingly involved in her local HSA group. She has served on its board of directors for several years and has lent her hand to everything from editing newsletters and giving presentations to helping organize

educational events such as the annual symposium. One of her most important contributions has been helping to raise funds in support of the National Herb Garden within the U.S. National Arboretum in Washington, D.C. This garden, which was a “gift from the HSA in 1980,” Ruffini explains, helps make visitors aware that the herbal world encompasses so much more than “just parsley, basil, and rosemary.”

A little closer to home, HSA members conduct a yearly horticultural study to assess herbs on their worthiness for promotion as the organization's Herb of the Year. “The study involves raising a native herb,” says Ruffini, “and keeping records from date of planting and progress, or lack of progress of the plant's growth.” Last year, for example, she evaluated dittany (*Cunila origanoides*), which “made it through the winter but died in the extreme cold this past spring,” she reports. This year she is keeping track of narrow-leaf mountain mint (*Pycnanthemum tenuifolium*).

THE NEXT GENERATION

Herbs of all kinds mingle with an assortment of other plants in Ruffini's shady half-acre garden, including “76-year-old hostas from my grandparents' garden.” And just as her grandparents nurtured her interest in the botanical world, she hopes to do the same for her own grandchildren. She feels that gardening is not as mainstream for their generation as it was for hers and that may result in less environmental stewardship. Through gardening and the other outdoor activities Ruffini does with her grandkids, she hopes to help them “understand that we must all tend to our planet.”

Lynn Brinkley is an editorial intern with The American Gardener.



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Backstage *in the* Garden



Do you have more plants than you know what to do with right now? Create a holding bed—a temporary nursery—to care for them until you can place them in the garden. BY LINDA ASKEY

PRONE TO spontaneous plant purchases, as well as being a compulsive plant propagator, I have had a holding bed as long as I have gardened. A place to park everything I couldn't live without yet had no immediate time or space to set in the garden, it was my guilty secret.

My first clue that I wasn't alone was in an early catalog from Heronswood Nursery, the connoisseur's mailorder nursery during its heyday in the 1990s and early aughts. In one, nurseryman and author Dan Hinkley referred to his holding bed as his "procrastination garden." Suddenly I realized the cluster of pots near the driveway had a name—and not a diagnosis.

Many years later, my holding bed is still in the spot where I nurture hopes for my future garden, where I keep new perennials, shrubs, and trees that need to wait for summer's heat and drought to pass before being moved to their permanent home. There too are the disappointments—the plants that have not thrived or those that didn't work in my garden's scheme. There are also the extras—plants grown from divisions or ones uprooted while weeding that I couldn't throw away. Occasionally I find a place for them in the garden; more often they are given to visitors. And I must confess that I sometimes keep plants in my holding bed much longer than I should, so it really is a procrastination garden.

It turns out I have a lot of kindred spirits. Earlier this year, *The American Gardener* asked you about your holding beds, and you responded! Your answers reveal that each holding bed is as individual as the owner.

LOCATION, LOCATION

Regardless of the reason for having a holding bed, it must be properly located. **Susan Shepard** (Jackson, Tennessee) found an ideal spot for hers that faces east behind a garden shed. She says, "That gives it protection from west winds and storms. It receives morning sun. Also, it's close to a rain barrel so watering is easy." Morning sun is the almost magical orien-



Holding beds can take many forms. Above: Leftover perennials from a fundraising sale at the Holy Redeemer Lutheran Church in Dryden, Michigan, are planted in a bed by the playground to be dug up for sale the following year. Left: An unused part of a driveway is a temporary stop for this group of potted plants in an Oregon garden.

tation where both sun- and shade-loving plants get enough of what they need to be happy.

Her holding area is clearly defined. “I used an eight-foot by four-foot by 11-inch raised bed frame, lined the bottom with landscape cloth, and filled it two-thirds full with sand,” she explains. “I bury potted plants in the sand. They don’t dry out as quickly that way.” The sand also insulates the pots from cold in the winter, and the pots are less likely to be tipped over by wind. The landscape fabric slows the growth of roots that naturally seek to grow outside of the pots.

NURSERIES FOR GOOD CAUSES

Donna Shirer Cochrac (Brecksville, Ohio) faced an unenviable situation last year. She writes, “When contractors were ripping up my yard to make connections to a new sanitary sewer, I needed a place to hold shrubs and perennials until my gardens could be restored. I used a section of my vegetable garden for this.” In the process, Cochrac realized she had

ESSENTIALS IN A HOLDING BED

Because holding beds are work areas, they are usually not picturesque, but they do need planning to be most functional. Here are some key considerations:

- Appropriate light exposure (sun or shade) is critical. If you don't have room for both a sun and a shade bed, look for a spot that has both, or bright shade at the very least. It can be surprisingly effective to use taller plants to shade smaller ones, and set newly divided plants on the north side of a taller plant to shelter them temporarily from hot afternoon sun.
- Having a spigot nearby makes watering easier, especially if your plants are in containers. Container plants may need to be watered more than once during the day, especially in a sunny spot in the summer. If this isn't feasible, find an area in your garden where you can put the plants temporarily in the ground so they can take advantage of soil moisture.
- Locate the bed where there is protection from prevailing winds to prevent plants from drying in summer, freezing in winter, and blowing over anytime. Clustering pots together in winter will help insulate the plants from temperature extremes, as does mounding loose soil, sawdust, bark mulch, pine needles, or piles of shredded leaves around pots and root balls. Jason Reeves says, "A few times I've sunk the whole plant in the pot in a hole in the ground for the winter."
- If you are an enthusiastic propagator and have the space, a cold frame is a great addition to a holding bed, making it easier to grow plants from seeds, as well as divisions and cuttings. —L.A.



Nurseryman Dan Hinkley maintains a series of cold frames as holding areas for plants at Windcliff, his garden in Indianola, Washington.

too much shade to properly grow most vegetables, so now most of her vegetable garden serves as a holding bed. "I am going to start transplanting divisions of my own perennials," she says, "so I can have large, well-rooted plants to dig up and sell at our Cuyahoga County Master Gardeners annual Plants in the Park sale next spring."

Master Gardeners think alike. **Candice Meyer** and **Mary Robinson** (Dryden, Michigan) maintain a holding bed at the Holy Redeemer Lutheran Church garden, where they are longtime volunteers. Proceeds from a perennial and bake sale each spring help fund the garden's development and maintenance. Meyer recalls, "Because we didn't want to discard the leftover perennials, we created a bed along the fence that encloses the children's playground and began planting selected ones

there. This not only enhanced the playground and back of the church, but we now have plants that we can dig up or divide for our sale."

Joan Lindquist (Bridgeport, Connecticut) has kept as many as 500 plants for her garden club in her garden. Divisions from member gardens are taken when the first perennial shoots emerge, and then they are grown in Lindquist's holding beds for the garden club plant sale in May. "Some of the holding areas are the raised beds we use for our vegetables," she says. "Others are between raised beds. Still others are under or between bushes where the plants will get proper light."

TO EACH ITS SEASON

Winter container plants are chosen most often for their hardiness. Whether evergreen, winter flowering, or both, they

are seldom the showiest choices for summer. During the warm months, **Jason Reeves** (Clarksburg, Tennessee) maintains a grouping of ceramic containers at the end of his driveway filled with bright mixtures of annuals and tropicals. About mid-November, he removes these plants, stores the ceramic pots, and turns to his holding bed for replacements. "I have four large plastic pots that are planted for winter," he says. "They spend the summer at the sunny end of my holding area." These pots feature evergreen trees such as 'Araucarioides' Japanese cedar (*Cryptomeria japonica*) and a curly Harry Lauder's walking stick (*Corylus avellana* 'Contorta'), a deciduous shrub with eye-catching twisted branches. In early June, Reeves moves the trees back to the holding area so he can once again create new, colorful displays for summer.

ROOM TO GROW

Sometimes new plants can't compete successfully with established plants. As a garden designer and blogger, **Claire Jones** (Sparks, Maryland) regularly receives samples of new plants for testing. She says, "They are usually quite small, and I don't want them to be overwhelmed in my gardens." So she plants them in a small, sunny holding bed near her vegetable garden. "Once they grow in a little bit, I have a better idea of how they will perform and can select the perfect location on my property to transplant them."

Martha Sykora (Annapolis, Maryland) uses her holding bed the same way for small saplings. She lets them grow for a couple of years before she sets them among established plants in her garden. In addition to height, the young trees will develop a bigger root system that increases their chance of survival.

FACILITATING A MOVE

Ginger Turk (Midway, Arkansas) moved from Illinois three years ago, and during the months traveling between two homes, she gradually relocated plants from her former garden to raised holding beds in the new garden. She says, "There are five raised beds that get shaded from the intense afternoon sun by two huge oaks, and the plants love it here! It's so nice to go out to my instant 'nursery' for stock whenever needed. Also, if a plant isn't thriving in a spot, I'll move it back to the nursery for rejuvenation, and then re-think the location. Today I can't imagine being without the convenience of a holding bed."

Sherran Blair (St. Petersburg, Florida) and Martha Sykora also found their holding beds invaluable when they relocated. Blair made a big jump from USDA Zone 6a in Ohio to Zone 10b in Florida, so her holding

bed allows her an opportunity to observe the habit and performance of new plants and visualize effective combinations before moving them to the garden. Although Sykora only moved a short distance to her current home, her holding bed was more than a temporary space for the plants from her former garden. It was meaningful she says "to preserve the memories of the occasions when some of the plants were added to the gardens at our previous house."

GROWING, NOT HOLDING

For some gardeners, holding beds serve as mini gardens with specific functions. Master Gardener **Gayle Chatfield** (near Lake Superior, Wisconsin) writes, "I have large raised 'holding beds' for holding plants, seeding perennials and shrubs, propagation, and to use as cutting gardens." Chatfield has beds in both shade and part sun. Raised beds allow her to plant intensively.



These beds in Ginger Turk's garden in Midway, Arkansas, were originally created to hold plants being moved from her former home.



“I currently have small *Syringa yunnanensis* plants grown from cuttings from a friend’s shrub, and seedling *Viburnum trilobum* shrubs from a particularly nice specimen in the wild,” she says. “I also propagate unusual trilliums and native wildflowers and give them away.”

“I call such beds my nursery beds,” says **Linda Trapkin** (Syracuse, New York). “I plant my tulips (used as annuals for cutting), divisions from my main beds that I don’t yet have the courage to compost (such as daylilies), and divisions (Siberian irises) to use in bouquets. Essentially I am making an auxiliary cutting garden.”

TO PLANT OR TO POT

Gardeners are divided between those who plant in the soil of their holding beds and those who hold their plants in pots. **Mark Miller** (Columbus, Ohio) says, “I never plant things in the ground that I know I will have to transplant later.” He has a small holding bed in filtered shade in his backyard mainly for newly purchased plants “destined for my mother’s garden the next time I see her. I leave



Top: Gayle Chatfield, shown with her dog, Chesapeake, constructed large raised beds to serve as holding areas. **Above:** In this bed, Chatfield is propagating Japanese primrose (*Primula japonica*), ‘Golden Tiara’ hosta, pink turtlehead (*Chelone lyonii*), and Celandine poppy (*Stylophorum diphyllum*).

the plants in their pots and cover them with mulch.”

Linda Leduc (Belchertown, Massachusetts) also keeps her plants potted. “I put each plant in its own pot, add-

ing good composted soil and bone meal first,” she says. “Some stay in pots only a few weeks, but others I’ve had in their pots for a year or more.” To keep plants through the winter, she moves them to a sheltered location near a shed. Fallen leaves can be raked between and over the pots to provide insulation from the cold.

On the other hand, it is easier to maintain plants that are rooted in soil and can tap a greater supply of moisture and nutrients, such as the holding bed/border at the Holy Redeemer Lutheran Church. It all depends on what works best for you.

Finally, I echo the sentiments of **Lisa Oliver** (Grayling, Michigan). She writes, “My holding gardens have become a necessity due to my passion for wanting to add new plants to the garden, prior to having a plan.”

Thank heaven for holding beds! 🌿

Linda Askey is a horticulturist who writes from her experiences in her Birmingham, Alabama, garden, where she has two holding beds of potted plants, one for shade and one for sun.



Divine Daphnes

DAPHNE IS a seductive genus of ornamental flowering shrubs adored for their fetching foliage, intensely fragrant flowers, and—in a few cases—showy fruits. The adjective seductive is appropriate, given the genus name honors the beautiful nymph in Greek mythology who was turned into a tree to protect her from the lustful pursuits of the god Apollo. Purists will grouse that the ancient Greeks connected the name *Daphne* with the plant modern taxonomists know as bay laurel (*Laurus nobilis*), but such quibbles spoil a good story line.

The genus includes some 70 species of shrubs native primarily to temperate Europe and temperate to subtropical Asia. In addition, breeders have mingled the best characteristics of two or more species to

This diverse genus of showy flowering shrubs is prized for the heavenly fragrance of many species.

BY PAUL LEE CANNON

'Carol Mackie', a selection of the hybrid *Daphne* × *burkwoodii*, is popular for its highly fragrant pinkish-white flowers in mid-spring, attractive variegated foliage the remainder of the year, and its relative ease of growth. Here it stars in a colorful springtime tableau at Chanticleer garden in Wayne, Pennsylvania.

develop a number of wonderful hybrids. Some species are evergreen and others are deciduous, although in a few cases this distinction is hazy because plants are evergreen in warmer climates and deciduous in cooler regions. Most, but not all, have fragrant flowers.

The tiny flowers are clustered in terminal or axillary inflorescences. The primary flush of bloom is in late winter or early spring, although some of the newer hybrids will bloom again in summer to fall. The flowers generally fall somewhere along the continuum of iridescent white to deep pink, but a few outliers, such as *D. jezoensis*, have greenish or yellow blossoms. In many cases the flowers offer a two-tone effect because the color of the buds contrasts with that of the interior of the flowers. Some

flowers also display subtle color changes as they mature. As for the fragrance, words can't really do justice to the range of intoxicating scents. Let's just say they smell really damn good.

WORTH THE FUSS

Daphnes are cherished additions to nearly any garden, and not just for their scented flowers. "There's something about the whorls of the foliage, the symmetry, that I respond to," says Lauren Springer Ogden, a garden author and landscape designer who grows several daphne selections in her expansive garden on the outskirts of Fort Collins, Colorado.

The high reward of sublime fragrance doesn't come without an accompanying high risk, so let's get the caveat out of the way now: Daphnes are highly susceptible to root rot. "Just when you get a daphne established, it starts to do what we refer to as 'the daphne dance of death,'" says Paul Cappiello, executive director of Yew Dell Botanical Gardens in Crestwood, Kentucky. "One day the plant's never looked better, and then three weeks later

NEXT OF KIN

Daphnes belong to Thymelaeaceae, a plant family that includes 50 genera and nearly 900 species of flowering trees, shrubs, and vines. Their best known ornamental relatives include paper bush (*Edgeworthia chrysantha*), a shrub with fragrant winter flowers whose bark is used in making high-quality Japanese paper, and leatherwood (*Dirca palustris*), a woodland shrub native to a wide swath of eastern and central North America. —P.L.C.

half the plant dies off." While this may sound discouraging, it hasn't deterred Cappiello from growing daphnes, and it shouldn't stop you from trying them in your own garden, either.

Here are some of the daphnes highly recommended by the experts I interviewed, and a few more are included in a chart on page 21. In researching this article, I also relied heavily on *Daphnes: A Practical Guide for Gardeners* by Robin White (see "Resources," page 20). White is an

award-winning British nurseryman who has bred many notable daphne hybrids.

Retail nurseries typically carry only a few of the best known selections, so you'll probably need to rely on specialty nurseries (see "Sources," page 20) to locate some of these plants.

Winter or fragrant daphne (*D. odora*, USDA Hardiness Zones 7–9, AHS Heat Zones 9–6) is one of the most widely cultivated species. It causes a scent-sation from late winter to early spring when its rosy-pink buds open into clusters of pale pink or white flowers so sweetly fragrant you're apt to sniff your way in search of the source. The glossy bright green foliage offers its own allure, cloaking attractive brown stems that form a tightly mounding habit three or four feet tall and wide.

Several selections are worth growing, starting with 'Aureomarginata'. Its clusters of flowers start off deep pink before becoming white in late winter/early spring. Shiny, dark-green leaves are distinguished with pale, creamy-yellow edges. This attractive contrast, along with the shrub's dense,



Daphne odora 'Rebecca'

Resources

Daphnes: A Practical Guide for Gardeners by Robin White, Timber Press, Portland, OR, 2006.

Manual of Woody Landscape Plants (7th ed.) by Michael A. Dirr, Stipes Publishing, Champaign, IL, 2009.

Sources.

Briggs Nursery, Elma, WA.
www.briggsnursery.com.

Broken Arrow Nursery, Hamden, CT.
www.brokenarrownursery.com.

Gossler Farms Nursery, Springfield, OR. www.gosslerfarms.com.

Klehm's Song Sparrow Farm and Nursery, Avalon, WI. www.songsparrow.com.

Monrovia Nursery, Azusa, CA.
www.monrovia.com.

Wayside Gardens, Hodges, SC.
www.waysidegardens.com.

Whitman Farms, Salem, OR.
www.whitmanfarms.com.



mounding habit, work wonderfully in a shade garden.

'Maejima' is stunning because of the showy leaves, which feature wide strips of yellow lining the margins of shiny, rich green foliage, creating extraordinary contrast with the fragrant, dark purplish-pink flowers. Even out of bloom, 'Maejima' offers year-round interest. It grows three to four feet tall and wide.

Richie Steffen, who oversees a collection of rare and unusual plants at the Elisabeth C. Miller Garden in Seattle, Washington, considers 'Rebecca' one of the best of the newer variegated forms. "It's very floriferous and super fragrant," he says. 'Rebecca' features soft gray-green foliage with margins even more creamy pale-yellow than those of 'Aureomarginata.' The winter and early spring blooming flowers start off as purplish-red buds before unfurling into pretty pink clusters. Fleshy, berrylike red fruits follow. It grows four to five feet tall and wide with a bushy, compact habit.

Rose daphne (*D. cneorum*, Zones 5–8, 8–5) is something of a rambler in its native habitat, which covers a large swath of central Europe from alpine regions down to the Mediterranean. Growing to a foot tall and three or four feet wide, its prostrate

habit lends itself to use as a groundcover. The rich, reddish-brown bark is attractive, as are the narrow, dark-green leaves. Profuse clusters of small, pale- to bright-rose pink, powerfully fragrant flowers bloom in early spring and then on and off throughout the summer. It is adaptable to a variety of landscape uses, including rock

gardens, and is more tolerant of sunny sites than some other species, as long as the roots are protected from drying out.

Lilac daphne (*D. genkwa*, Zones 5–7, 7–5) naturally occurs from rocky hillsides to moister lowland regions in China and Korea. It is a deciduous shrub that was



introduced to Western horticulture in the late 19th century. Unique wands of unscented pale violet to lilac flowers bloom on bare stems before the foliage emerges in spring. Lilac daphne is relatively compact, growing to three feet tall and wide with an upright branching structure. It grows best in regions that experience hot summers and consistently cold winters.

February daphne (*D. mezereum*, Zones 4–7, 7–4) produces a profusion of heavily scented purple or white flowers that cover the stems of this small, cold-hardy deciduous shrub in spring before its light green leaves appear. The fragrance, reminiscent of hyacinths, can scent a large area on a balmy spring day. Showy red to reddish-purple fruits cover the plant after flowering and attract birds. Since it only blooms on the old wood of the previous season, plant it in deep, nutrient-rich soil or feed regularly to ensure bountiful blooming the following spring. It grows three to five feet tall and wide.

Nepalese paper plant (*D. bholua*, Zones 7–9, 9–7) is native to the woodlands of the Himalayas. It is typically upright and columnar in form, growing six to 10 feet tall and up to four feet wide with long, open, branchless or sparsely branched stems. Reports from growers indicate this may be better suited to West Coast gardens. Its evergreen to semi-evergreen leaves are narrow, medium green, and slightly leathery. Older foliage tends to drop after flowering. Flowers, produced only on the previous season's growth, bloom in clusters at the ends of the stems, appearing as early as mid-winter and lasting through early spring. Color varies from white to a rosy purplish pink; a potent, pleasing fragrance is constant while the plant is in bloom.

A selection 'Jacqueline Postill' dazzles the senses with terminal clusters of remarkably fragrant flowers from January to March. The purplish-pink to white flowers are followed by deep, dark-purple, berrylike fruits. It grows slowly to 13 feet tall and about five feet wide.

HYBRIDS

Daphne* × *transatlantica (Zones 5/6–9, 9–5) This hybrid group was developed from crosses between *D. caucasica* and *D. collina*. "The good thing about *D. ×transatlantica* selections is that they bloom most in May but then again sporadically all through the summer," says Andrew Bunting, director of collections for the Chicago Botanic Garden in Glencoe, Illinois. "And the few flowers in summer give you more than enough fragrance because they're so intensely fragrant."

Top selections include 'Blafra' (trademarked Eternal Fragrance), which was selected in 1995. It's a tidy, round, mounding evergreen shrub of dark green foliage that sends out a heavy flush of fragrant pink-white blooms in spring and repeat blooms from summer through fall. In his book on daphnes, White reports that Eternal Fragrance bloomed April through November during a trial in the Pacific Northwest and could tolerate temperatures as low as 15 degrees Fahrenheit (it can survive at lower

MORE DAPHNES WORTH CONSIDERING

Botanical name (Common name)	Height, width (ft.)	Notable characteristics	Origin	USDA Hardiness, AHS Heat Zones
<i>Daphne jezoensis</i> (Japanese daphne)	2, 2	Deep-yellow flowers with a freesialike scent	Northern Japan	6–8, 8–6
<i>D. odora</i> 'Marianni' (Fragrant daphne)	3, 3	Creamy yellow variegation, fragrant blush-pink flowers	China	6–10, 9–6
<i>D. tangutica</i> (Tangut daphne)	2, 3	Fragrant white to lilac flowers, orange-red fruits	Western China and Tibet	6–9, 9–6
<i>D. ×rollsдорфii</i> 'Wilhelm Schacht'	1–2, 1–2	Fragrant, pinkish-purple flowers	Hybrid	6–9, 9–6
<i>D. ×transatlantica</i> 'Summer Ice'	4, 6	Pale green-and-cream foliage, fragrant pale pink flowers in late spring, reblooming summer to fall	Hybrid	5/6–9, 9–5



D. jezoensis



D. tangutica

temperatures, but becomes deciduous). It grows two to three feet tall and wide.

Named after the late plantsman Jim Cross of Environmental Nurseries in Long Island, New York, 'Jim's Pride' has ever-green/semi-evergreen foliage and offers an open branching habit, narrow, rich-green leaves and clusters of white, extremely fragrant flowers with red-purple buds. "Jim's Pride' is just a phenomenal plant," says Cappiello. "For us, it starts blooming in May through to December. It never gets a gigantic amount of bloom but it's always got some bloom and fantastic fragrance."



Daphne × *transatlantica*
'Blafra' (Eternal Fragrance)

In zones with mild winters, it blooms in late spring and re-blooms summer through fall. With the exception of summer drought, White reports that this daphne hybrid "tolerates a wide range of conditions." It grows three to four feet tall and wide.

D. x burkwoodii (Zones 4–8, 8–4) was created from a cross between *D. cneorum* and *D. caucasica*. The selection 'Brigg's Moonlight' is a gorgeous study in contrasts. The variegated leaves are a bright, creamy, dreamy yellow accented with dark-green flecks and margins. Then come the wonderfully perfumed, pale-pink flowers in late spring. 'Brigg's Moonlight' can be one of the more challenging daphnes to grow, but once es-



Daphne × *burkwoodii*
'Brigg's Moonlight'

tablished, it is spectacular. Light shade (to avoid scorched leaves) and excellent drainage are a must. It reaches two-and-a-half feet tall and two feet wide, with a nice upright habit.

Everyone I spoke with for this article was enthusiastic about the selection 'Carol Mackie'. The consensus is that this hybrid is just plain beautiful and relatively easy to grow. The shiny, lime-green leaves are small, oval, and edged in cream, providing stunning contrast for a mid-spring flush of fragrant blush-pink and white flowers that re-bloom in fall. A moderately paced grower, 'Carol Mackie' can succeed in not-so-fertile soil as long as it drains well. It grows three to four feet tall and wide.

D. x medfordensis 'Lawrence Crocker' (Zones 6–9, 9–6) is a real showstopper with its terminal clusters of fragrant, hot-pink flowers that bloom May to June. The tiny, tidy, lime-green leaves are sweet, too. Introduced from Siskiyou Rare Plant Nursery by plantsman Lawrence Crocker, it reaches a perfectly petite mature size of 12 inches tall by 18 inches wide. "It's a beautiful landscape plant and grows so perfectly," says Steffen from the Miller Garden in Seattle. "If the drainage is good, it's a great plant for beginners. It thrives on a little neglect."

GROWING TIPS

As noted earlier, daphnes are highly susceptible to root rot, so planting them in consistently moist, moderately fertile soil

that drains well is crucial. “Heavy, poorly drained soils are a deal breaker for most daphnes,” says Bunting.

The wet winters in Kentucky, combined with heavy clay soil, made daphne cultivation challenging for Cappiello at Yew Dell Botanical Gardens. “We needed to heavily amend the soil and work with a little micro topography to get their roots up out of the muck,” says Cappiello, who has had some success growing daphnes in scree (gravel) and rock gardens. “You basically have 18 inches of pea gravel and fine gravel and sand mixed, to provide an en-

vironment where the roots can get down to the heavier soil and get moisture where they need it but the crown stays up out of it,” he explains.

garden freaks, so a lot of the little ones are the kind we want anyway.”
Aside from the drainage issues, daphnes are relatively low maintenance plants. Pruning is minimal because most daphnes have a naturally mounding, compact habit and grow at a slow to medium rate. The center of a daphne can become bare of leaves and flowers as the plant grows over time. If this happens, branches can be cut back after spring flowering to encourage bushier growth. Seldom do I ever have to prune my daphnes, and the few times I lightly did so, they responded with healthy new growth.



Daphne × *medfordensis* 'Lawrence Crocker'

vironment where the roots can get down to the heavier soil and get moisture where they need it but the crown stays up out of it,” he explains.

If you have heavy clay soil, another option is to plant daphnes in a raised bed. It may seem obvious, but don't plant daphnes in a site where runoff from roofs, porches, or irrigation systems may pool.

In Colorado, Ogden doesn't have to worry about drainage because the native soils are gritty. She grows mostly alpine selections, which stay low enough to avoid the extreme desiccation caused by the cold, dry, brutal winds of her climate zone. “The smaller and shorter the daphne, the more likely it won't get its butt kicked,” she says. “People here are rock

Daphnes generally thrive in a site that gets morning sun and afternoon shade in summer, but there is considerable adaptability depending on region and individual species. In drought-prone areas, they may need supplemental watering from time to time.

Most daphnes seem to grow well in soil that has a pH range from slightly acidic to slightly alkaline, so test your soil before planting. Amend the soil around daphnes annually with organic matter or apply a balanced slow release fertilizer. Yellowing leaves may indicate a need for more nutrients; remedy with applications of iron chelate as needed during the growing season. Use organic mulch to keep roots cool.

DESIGNING WITH DAPHNES

Daphnes fit beautifully into a wide variety of garden styles and situations. Here are a few design tips.

- Plant daphnes where you can enjoy the scent up close, such as next to seating areas, along walkways, or near steps.
- Grow a variety of species and hybrids for succession blooming and year-round interest.
- Group with Japanese maples, camellias, and azaleas in a woodland garden.
- Use selections with variegated leaves to brighten shady spots.
- Try daphnes in a well-drained container—tufa pots work well—that can be easily moved when the plant is in flower (and indoors for the winter if necessary).

—P.L.C.

Aphids can afflict some daphnes, particularly *D. jezoensis* and *D. mezereum*, but they are easy to dislodge with a strong jet of water from a hose. Slugs and snails may take a liking to the new foliage and flower buds of some selections during mild periods in winter.

Because all parts of daphnes, including the colorful, berrylike fruits (technically drupes), are poisonous if ingested, they are rarely bothered by deer or other herbivores. This is an important thing to be aware of if children or pets are regular visitors to your garden.

A lesson I learned the hard way is that daphnes are resentful of being transplanted. A winter daphne I grew in a pot put on such vigorous growth, I thought it would welcome more room to grow, so I transplanted it to a sunny border. It soon expressed disapproval by dropping leaves. After leaving it in the ground for several months, I ended up moving it back into the original pot. The plant is still hanging on but is nowhere near as vibrant as it once was.

“With daphnes, you have to be a little flexible,” says Cappiello. “It can take a few tries before you hit the right combination, then once you do, don't mess with it.” In return, these plants will richly reward you for your efforts with their tidy good looks and unbeatable fragrance.

Paul Lee Cannon is a freelance writer based in Oakland, California.

Guerrilla Gardening

BY PATRICIA A. TAYLOR

While technically illegal, gardens planted on other people's property are enriching communities around the country.



COINED IN THE early 1970s, the term “guerrilla gardening” refers to a powerful but largely unstructured movement that has taken various forms across the United States and abroad. Los Angeles gardener Ron Finley captured this movement’s ethos in a speech he gave in 2013 when he declared, “gardening is the most therapeutic and defiant act you can do.” A video of the speech, available on the TED.com website, described his efforts to

grow vegetables on city land bordering his own property. His talk, which went viral, and other publicity about his scowflaw garden resulted in a change in not only his community, but also the law.

That last word—law—is key to the concept of guerrilla gardening, which basically means planting on property without the legal right to do so. Depending on who is doing the gardening, the goals vary from making healthy food more accessible

to beautifying eyesores to land stewardship and community building.

No matter what the goal, all the efforts are technically illegal. That illegality often becomes an issue with the reclamation of thousands of abandoned urban acres across the country. Some property owners welcome guerrilla gardening efforts, others bulldoze them, still others fight to make the gardens legal, and new organizations work to evolve the concept.

COURTESY OF GREEN GUERRILLAS



the next spring until the owner mowed them down. This illustrates one aspect of guerrilla gardening: If it's done to beautify private property, it can be successful though the result is often short lived.

In Seattle, Washington, longer-term guerrilla gardens have sprung up all over the city's small traffic roundabouts. "I think it is so neat," says Will Crothers from architecture and design firm Schemata Workshop, "that people have taken it upon themselves to garden wherever they can and to beautify their environment. It really adds to the city." Thus when such gardens beautify a small amount of public space that would otherwise remain bare, it is generally admired.

widespread publicity he generated with his TED talk certainly helped his cause.

While Finley concentrates on enriching his South Central Los Angeles area by growing healthy food and encouraging community participation, Scott Bunnell has been beautifying the entire Los Angeles county for more than three decades through ornamental gardens on barren plots, generally along streets and highways. Called the "Che Guevara of guerrilla gardening," in a local documentary on his work, Bunnell emphasizes that plants in these gardens need to be attractive as well as resilient enough to survive without care. He favors succulents and propagates hundreds for his street plantings, often gleaning new plants from his other thriving guerrilla installations. Most do



Left: The nonprofit Green Guerrillas in New York City provides resources to community gardens like this one on city-owned land near a subway line. **Above:** Guerrilla gardeners in Los Angeles plant water-thrifty succulents in a barren patch of ground to beautify a roadway.

KEYS TO SUCCESS

Garden writer Marty Ross became a guerrilla gardener when she decided to plant tulips in an empty lot near her former Kansas City, Missouri, home. The owner of the property happened to walk by while she was placing the bulbs. "What are you doing?" he demanded. "Planting tulips to make this look nicer," Ross sweetly replied. That was fine with the owner and the tulips were gorgeous

Then there is Ron Finley's example in Los Angeles. City law actually encouraged plantings along the street, but required a \$400 permit to include vegetables. Because Finley didn't have a permit, he was ordered to remove his flourishing edible garden. He successfully petitioned the city council to not only allow his garden to remain but also to change the guidelines so that others could grow vegetables without needing a cost-prohibitive permit. Of course, the favorable,

well, though a few occasionally suffer from vandalism and other damage. Nevertheless, Bunnell and his SoCal Guerrilla Gardening compatriots keep planting on.

LESSONS FROM A BULLDOZER

Illegal but small-scale efforts that look pretty are usually tolerated, but the situation can get more precarious when larger pieces of land are in question. In 1973, a man going by the name of Adam Purple started

working on an abandoned lot in the Lower East Side of Manhattan. By 1980, he and his neighbors looked upon 15,000 square feet of beautifully designed concentric circles filled with vegetables and trees, which he dubbed the Garden of Eden.

Shortly afterwards, the city announced the garden would be destroyed for public housing. Years of protest followed, but after a Federal judge cleared the way, it took just 75 minutes to demolish the garden one morning in January 1986. That action, and similar bulldozing events elsewhere, have been seared into the minds of many a guerrilla gardener. Small plantings, yes; long term, larger efforts, think twice.

Rosie Sharp carried that lesson with her when she moved from New York City to Detroit, Michigan, in 2009. “You have to make an investment in the soil, particularly with regard to vegetables,” she says, “and that equity is totally lost when a developer buys the property.” After joining a community garden in her new neighborhood, she discovered that the city owned the land, which meant that the community garden was actually a guerrilla garden.

Sharp decided to help the community gain title to the land, which was among more than 66,000 vacant lots in the city according to the Detroit Land Bank Authority. It proved to be no easy feat, but with her New York determination, she persisted in filling out reams of forms and attending innumerable meetings for three years. She not only organized a limited liability company to buy the garden, but also was instrumental in creating Detroit Land Forum, a program that advises citizens on purchasing city-owned land.

LEGAL CONUNDRUMS

Unlike Sharp, Jenga Mwendo doesn't have the time to conduct the legal research needed to save the Ernst Garden, a community garden in her neighborhood in New Orleans' Lower 9th Ward. It is on land that was adjudicated to the city decades ago because of unpaid property taxes by the registered owner, who is likely deceased. Mwendo started organizing neighbors to clean up and replant the garden in 2007. She established the nonprofit Backyard Gardeners Network to help support this garden as well as create a second community garden nearby.

Today, both are thriving vegetable gardens serving as a community locus and



A woman lends a hand weeding this garden that is supported by the NeighborSpace program, which helps communities in Chicago to access urban land legally and provides long-term support.

a source of healthy food. However, land values are rising in this area and the city is seeking to obtain revenue by selling such adjudicated properties. “The Ernst Garden was added to the City auction list earlier this year,” says Mwendo. “We successfully had it removed, but it may end up there again,” she adds. Mwendo takes comfort from the fact that even if the property is sold, it is such a tiny lot that it's unlikely anything could be built on it and still abide by the building code. “So, we believe that the best use for it is its current use as a community garden,” she says.

Even with substantial legal assistance, the preservation of a guerrilla garden may not be assured. In Philadelphia, Amy Laura Cahn heads up the Garden Justice

Legal Initiative of the Public Interest Law Center, which provides *pro bono* work to underserved city residents. Her latest case involves La Finquita, a guerrilla vegetable garden that has been a carefully tended community fixture for 29 years.

In January 2016, garden members were literally locked out after the land was sold to a developer. Cahn is arguing the case on the basis of adverse possession. This concept, which has been in place in our country for over a century, varies from state to state. In Pennsylvania, it means that if a property is solely maintained by a non-owner entity for over 21 years, the property reverts to that entity.

Cahn estimates that it will take over a year to determine the fate of La Finquita through the court systems. Most guerrilla gardeners can't afford and may not even have access to this degree of legal expertise. In order to facilitate resident-responsible use of aban-



Guerrilla gardeners turned an abandoned lot in Philadelphia into an urban oasis they named La Finquita, which means “little farm.”



This flourishing community garden, created legally through NeighborSpace in Chicago, provides a source of fresh produce as well as a respite from its urban surroundings.

donated property, notes Cahn, “we must have the support of municipal governments.” Although many cities are trying to implement better policies, the scope of the problem—hundreds of thousands of abandoned plots across the country—is one that often overwhelms stretched municipal budgets.

GETTING ORGANIZED

Given the inevitable legal issues surrounding guerrilla gardens, more formal approaches have evolved. In Chicago, for example,

gardeners with their eye on an empty plot need not resort to guerrilla tactics. Instead, a nonprofit called NeighborSpace will help community groups to either gain ownership of or lease the vacant land. It also provides basic insurance, access to water, and connections to other support networks. To ensure a garden’s longevity, NeighborSpace requires groups to identify several leaders for the project and sign a partnership agreement to maintain the property.

“Guerrilla gardening can play an important role in drawing attention to un-

derutilized spaces,” says Ben Helphand, the organization’s executive director, “but they generally are lacking in terms of long-term preservation or ongoing stewardship.” NeighborSpace provides “an effective mechanism for communities to do what city governments and agencies can’t or won’t do,” says Helphand, empowering citizens to create green spaces without having to worry about potential legal repercussions.

In New York City, the community gardening scene has come a long way since Adam Purple’s time. However, the “overwhelming majority of community gardens are on city-owned land,” notes Steve Frillmann, executive director of Green Guerillas, a nonprofit that provides resources to such gardens. This means that these community gardens are still at risk for development, but now there are numerous organizations like Green Guerillas to help advocate for them.

This organization’s genesis goes back to the early 1970s, when Liz Christy led the transformation of a vacant lot in her neighborhood into a community garden, and founded Green Guerillas to help others to establish community gardens in their own neighborhoods. Its variant spelling aside, “this group did a wonderful job helping to turn struggling neighborhoods around,” says its board member Linda Yang. Today, the nonprofit offers a variety of resources, such as horticultural education, fundraising assistance, and consulting services to revitalize struggling or inactive community garden spaces.

As a modifier, “guerrilla” is defined by the Oxford English Dictionary as referring to actions or activities performed in an impromptu way, often without authorization. That word could well apply to citizens’ efforts to garden on abandoned properties across our country. Gardening, however, tends to require a longer-term investment that forces the guerrilla garden concept to evolve. While the excitement associated with surreptitious activity lessens with that evolution, what remains is the powerful satisfaction of starting a garden that creates beauty, often provides healthy food, and definitely enhances community life.

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Resources

Because guerrilla gardening is so site-specific in terms of climate and legal jurisdiction, there is no single information source for all areas. A basic introduction, however, can be found at www.WikiHow.com and searching for guerrilla gardening.

More information about the regional organizations mentioned in the article is available at these websites:

Backyard Gardeners Network, New Orleans, LA. www.backyardgardenersnetwork.org.

Green Guerillas, New York, NY. www.greenguerillas.org.

NeighborSpace, Chicago, IL. www.neighbor-space.org.

SoCal Guerrilla Gardening, Southern CA. www.socalguerrillagardening.org.

Books

Guerrilla Gardening: A Manual by David Tracey, New Society Publishers, Gabriola Island, British Columbia, 2007.

On Guerrilla Gardening: A Handbook For Gardening Without Boundaries by Richard Reynolds, Bloomsbury USA, New York, NY, 2008.



Hardy, attractive, and easy to grow, fountain bamboo (*Fargesia nitida*) is one of the most popular clumping bamboos.

SUSANNE LUCAS vividly remembers her first encounter with bamboo. It was the late 1960s, and she had ventured into her family's Maryland backyard with her pet guinea pig, which immediately wiggled free and headed straight for the bamboo screen between Lucas's property and the next door neighbor's. "I crawled in after him, and it ended up being a magical experience for both of us," recalls Lucas.

Lucas went on to become a horticulturist, eventually settling in Boston, Massachusetts, and those happy childhood memories were tarnished by the horror stories about bamboo's invasive qualities

BASIC BAMBOO BOTANY

Among the fastest growing plants on earth, bamboos are members of the grass family (Poaceae). Taxonomists have identified some 100 or so bamboo genera, of which only a couple dozen are widely cultivated in ornamental gardens. They are widely distributed globally, but the hub of diversity for bamboos is in tropical and subtropical regions of Asia.

From a gardening standpoint, bamboos are typically divided into two main types: running and clumping. "All bamboos are invasive to some extent, but it is the rate of invasion that concerns us most as gardeners," writes David Crompton

feet, although you'll find some that are shorter with a narrower spread and others that grow quite tall.

Bamboos spread by sending up new shoots from the rhizomes each year. These shoots, often clad in colorful, papery sheaths, emerge from the ground from late winter to early summer, depending on species and region. Young shoots are soft fleshed and easily broken or cut, but they gradually become more woody as they grow. Upward growth is achieved by expansion of the smooth sections of culm between the thickened joints, termed nodes. Branches and foliage emerge from these nodes. Bamboo foliage is typically linear or lance-shaped much like that of grasses but varies greatly in size depending on species. Individual leaves have bristle-like hairs on the margins and the undersides. The flowers, which form in small clusters akin to those of standard grasses, are tiny and rather insignificant (for more on flowers, see sidebar, page 33).

BENEFITS AND LANDSCAPE USES

So why grow clumping bamboos? Lucas ticks off a long list of qualities she admires: "Bamboos are relatively pest free, deer resistant, drought tolerant once established, long-lived, great CO₂ recyclers, provide shade and privacy and act as a sound barrier, as well as offer erosion control." Lucas also points out that bamboos serve as excellent wildlife habitat, especially for birds, which can hide from predators in the dense clumps.

Because bamboos are fast-growing, they are particularly good for creating focal points, screens, and hedges. "In the New England garden, I'm most attracted to the evergreen foliage of bamboo, including its winter texture and movement in the wind during those four to five months of cold weather, because most of our traditional evergreens are stiff and static at that time of year," says Lucas.

"Clumping bamboos are equally well-suited as specimen plantings," notes Tracy Cato, owner/operator of Thigpen Trail Bamboo Farm in Doerun, Georgia. "There's a lot to like about bamboos, but my favorite aspects are their beauty and fast-growing nature."

The wide range of bamboo sizes, growing habits, and looks makes it possible to find one to complement just about any

Bamboos *with* Boundaries

Clumping bamboos, which don't spread like their infamous runaway counterparts, allow gardeners to enjoy the beauty and grace of these giant members of the grass family.

BY JULIE BAWDEN-DAVIS

she heard from colleagues and clients. This unfavorable perception lasted until she attended a presentation on clumping bamboos at a professional conference and discovered there are many noninvasive bamboo species that can be incorporated into home landscapes, even in temperate climate regions.

"It's unfortunate that there is so much hyperbole when it comes to bamboo," says Lucas, who is currently president of the American Bamboo Society (see "Resources," page 33). "Clumping bamboos are not only beautiful additions to the landscape, but are truly adaptive and solve a host of landscaping and environmental challenges."

in *Ornamental Bamboos*. It is the species categorized as running bamboos that have resulted in bamboo's reputation as an out-of-control landscape invader, because this type spreads by vigorous underground stems, termed rhizomes, that can travel great distances, sending up new shoots along the way.

Clumping bamboos, on the other hand, have a less invasive rhizome structure. These plants form a tight cluster of upright stems—known as culms—that extend from a small root mass. These rhizomes slowly extend outward in a circular pattern at a rate between two to 12 inches per year. Height and spread for most clumping bamboos fall between 10 to 20

GROWING BAMBOO IN CONTAINERS

If you live in a region where clumping bamboos won't overwinter, or if you lack outdoor growing space, you can opt to grow them in large pots. Here are some tips for successful container culture.

- Carefully consider container choice. Select a container that is larger than three-by-three feet and is made from a sturdy material such as concrete or thick metal. Drainage holes are essential. Ralph Evans suggests using a container that has a straight rather than curving shape, because this makes it easier to remove the plant when you need to repot.
- Plant in high-quality potting soil. Use an organic, soilless mix that provides excellent drainage.
- Water weekly. In the absence of rainfall, flood the bamboo container once a week during the growing season and once every two weeks the rest of the year. Never let the pot sit in standing water or the roots will rot.
- Fertilize occasionally. Containerized bamboo requires additional nutrients. Apply a balanced, slow-release fertilizer at planting and then supplement with a high nitrogen fertilizer every three months during the growing season.
- Choose varieties carefully. Ideal choices for containers include *Fargesia rufa*, Mexican weeping bamboo (*Otatea acuminata* ssp. *aztecorum*), and various *Chusquea* species. The 'Fernleaf' cultivar of clumping bamboo (*Bambusa multiplex*) is also a good container choice, as is painted bamboo (*Bambusa vulgaris* 'Vittata'), which James Waddick notes grows quite large in the ground but can be kept to 10 feet tall in a container.
- Expect to repot regularly. Bamboo in containers needs to be repotted every two to three years because it rapidly becomes rootbound. "Remove the plant from the container and either divide it into two or three sections, or prune the roots. Replant in fresh soil," says Evans. —J.B.



Fargesia rufa is low-growing—maxing out at three to six feet—and distinguished by the rusty red sheaths that cloak new culms. It is a good choice for containers.

landscape, says Ralph Evans, owner of Vista, California-based wholesaler Botanical Partners, home of Bamboo Headquarters, where they offer more than 300 bamboo varieties. "If you want a tall, lacy bamboo perfect for growing in the shade, or a short, pendulous one for accenting a koi pond, you can find what you're looking for," he says.

RECOMMENDED SELECTIONS

For best results, start by selecting bamboo species appropriate to your local climate. "Do your homework," says Cato. "Since many bamboos aren't widely available, it's generally best to buy from a nursery that specializes in bamboo, as they can recommend the appropriate species for your location."

Here are some recommendations for clumping bamboos suited to different regions of the country. Keep in mind that microclimates also play a role in the type of bamboo you can grow. For instance, many *Fargesia* species don't do well in regions that endure hot and humid nights. More clumping bamboos are listed in a chart on page 32.

FARGESIA The genus *Fargesia* is one of the most popular choices for temperate region gardeners. Several hardy species and selections are available. These Chinese natives are all relatively slow spreading, low-growing, and respond well to moderate shearing.

Fountain bamboo (*F. nitida*): "This bamboo has dark purple to blue-gray culms and lacy foliage that creates a fountain-shaped, weeping growth pattern," says Evans. The plants reach 12 to 15 feet tall. A selection 'Jiuzhaigou' grows nine to 12 feet tall and features intensely red culms that age to yellow, and delicate, graceful foliage. The culm color is brightest when plants grow in full sun. USDA Hardiness Zones 5–9, AHS Heat Zones 9–5.

F. rufa (syn. *F. dracocephala* 'Rufa'): This compact species has rusty-red culm sheaths that make a striking statement in the garden, says James W. Waddick, a garden book author who has grown bamboos for 30 years in his Kansas City, Missouri, garden. The culms themselves are bright green, maturing to yellow, and reach six to 10 feet tall and wide in full sun to part shade. Zones 5–9, 9–1.

F. scabrida: The emerging culms of this species are covered in dark orange sheaths that eventually open to reveal lavender-blue culms that age to green. It grows 12 to 14 feet tall, with dark green, willowy leaves. This is one of the more heat tolerant of the fargesias, according to Lucas. Zones 6–9, 9–6.

BAMBUSA The genus *Bambusa* is native to tropical regions of China, so these selections are best suited to southern regions with long growing seasons and warm winters.

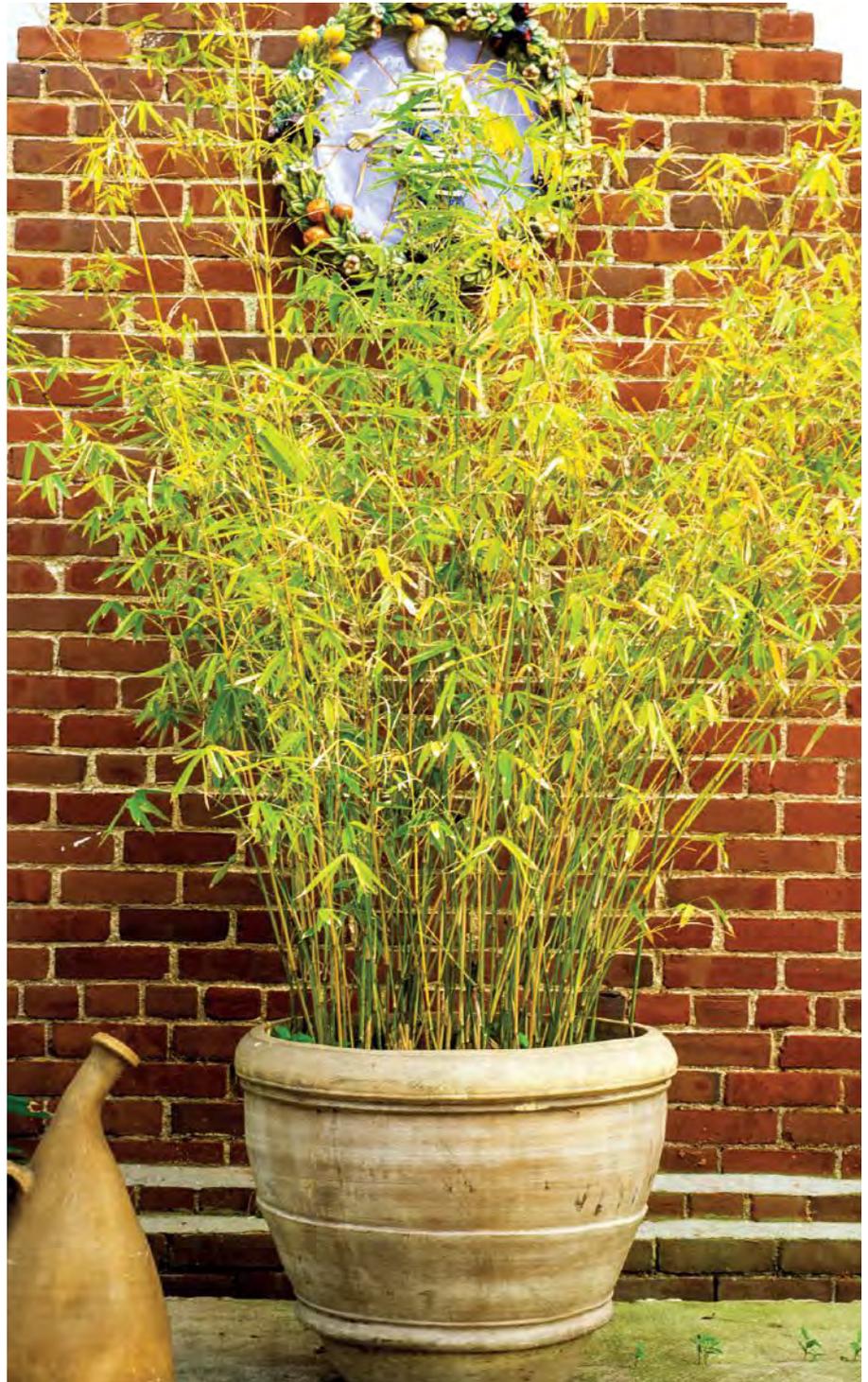
Bambusa multiplex ‘Alphonse Karr’: This selection grows 12 to 20 feet high



Above: A cultivar of weaver’s bamboo, ‘*Gracilis*’ has a columnar habit and graceful, willowy foliage. Right: Often grown in a container, *Bambusa multiplex* ‘Golden Goddess’ has bright yellow culms.

with culms that are golden yellow with green striping. When exposed to sunlight and as they mature, the culms take on a pink or deeper golden cast. Another selection, ‘Golden Goddess’, grows six to 10 feet tall with bright golden culms. Both selections form dense clumps with attractive foliage. Zones 9–11, 12–1.

B. textilis ‘*Gracilis*’: Sometimes called weaver’s bamboo, this upright bamboo grows 15 to 30 feet tall and is a good



choice for narrow spaces. It has bluish-green, thin-walled culms that can be used to weave baskets and willowy foliage that creates an attractive privacy screen. Zones 9–11, 12–8.

OTHER Although most of the bamboos in the genus *Chusquea* are native to tropical or subtropical areas of South and Central America, a few species that range into the highlands of Mexico

can be grown in American gardens. Of these, the best choice is probably Mexican climbing bamboo (*Chusquea coronalis*, Zones 9–11, 11–1), which is native to Mexico and Central America. This bamboo features graceful, arching culms that reach 10 to 15 feet tall. The culms are bright green to start, gradually becoming yellower as they mature. It is best sited in part shade and moist soil, or in a container in temperate regions.

MORE CLUMPING BAMBOOS TO CONSIDER

Name	Height (feet)	Distinctive features	Origin	USDA Zones, AHS Zones
<i>Bambusa lako</i>	20–30	Glossy, dark chocolate-colored culms	Indonesia	9–11, 12–9
<i>B. textilis</i> ‘Kanapaha’	20–50	Green culms with white cast	Asia	8–11, 12–8
<i>B. textilis</i> ‘RG Dwarf’	15–20	Compact selection	Asia	8–11, 12–8
<i>Fargesia denudata</i>	10–15	Compact with arching canes	China	6–8, 8–1
<i>F. murieliae</i>	10–14	Hardy species ideal for hedges, screens	China	5–8, 8–5
<i>F. robusta</i>	12–15	Dark green foliage; light green culms	China	5–9, 9–5
<i>Otatea acuminata</i> ssp. <i>aztecorum</i>	15–20	Lacy foliage on arching culms	Mexico	9–11, 12–1



Bambusa lako



Fargesia murieliae



Otatea acuminata
ssp. *aztecorum*

EASY CARE

Clumping bamboos are relatively easy to keep happy, especially if you are mindful of a few cultivation tips. In choosing a site, remember that these bamboos will spread gradually, so don't plant them too close to walkways, fences, or trees.

Choose a location in full sun to part shade, depending on species and your region. When it comes to sun exposure, bamboo is quite tolerant. "Bamboo will adapt to where it's planted," says Evans. "In a shady spot, the leaves may grow smaller than in full sun, and the plant may be shorter."

Ensure that the planting area has good drainage. Bamboos can grow in a wide variety of soil types, from acidic

to alkaline, but there is a misconception that they like to grow in water, according to Waddick. "In fact, the plant will do poorly in such situations. The roots like to go in and get some water, but the crown and rhizomes should never soak in it," he says. Symptoms of overwatered bamboo are yellow, spotted foliage.

"Bamboo is sensitive to desiccation, especially in winter, so any protection you can offer will help," says Lucas. If you live in a region that gets drying winds or have a garden that is particularly exposed to the elements, plant bamboo in the understory or where it will be shielded by other plants or structures.

Water bamboo on a regular basis for the first year after planting. For the first

month, check the area daily and water when the top one inch of soil has dried out. Once established, bamboos are fairly drought tolerant, but they will grow faster if you water them regularly. When the leaves begin to curl and their undersides become dull, that's a sign you need to water, says Evans.

While bamboos aren't heavy feeders, they will look their best if fertilized occasionally. Feed in spring, midsummer, and early fall with a fertilizer that is high in nitrogen, such as a 20-5-5, which will promote foliage growth.

Bamboos should be thinned regularly to keep them looking their best. This can be done any time of year. Remove no more than one-third of the culms at each pruning,

Sources

Bamboo Garden, North Plains, OR.
(503) 647-2700.

www.bamboogarden.com.

Lewis Bamboo, Oakman, AL. (877)
796-2263. www.lewisbamboo.com.

Thigpen Trail Bamboo Farm,
Doerun, GA. (706) 255-4901.
www.thigpenrailbamboo.com.

Resources

American Bamboo Society,
(www.bamboo.org).

■ The American Bamboo Society (ABS) currently has more than 700 members worldwide. Its mission is to spread the appreciation of bamboo, provide information regarding the plant's landscape uses, propagation, identification, and care, and support bamboo research. The ABS sponsors regular chapter events, including conferences, tours, and plant sales. It has introduced many bamboo species to the United States through the U.S. Department of Agriculture.

Ornamental Bamboos by David Crompton. Timber Press, Portland, OR, 2006.

cutting each cane at the base. When pruning, it's a good idea to wear sturdy gloves and eye protection, as the leaf blades can cause small but painful cuts. For privacy screening, you may choose to do very little pruning so that you have as dense a planting as possible. Bamboo used as hedging can be sheared in late summer and late fall.

Given clumping bamboo's many attributes, Waddick says it's unfortunate that many gardeners lump all bamboos into the invasive category. "I urge people to try clumping varieties," he says. "If it gets too rambunctious, you can always remove it." Chances are you may fall in love with bamboo and wonder why you hadn't planted it long before. 🌱

Julie Bawden-Davis is a Certified Master Gardener, blogger, and author of numerous books and articles on both indoor and outdoor gardening. She lives in Orange County, California.



A good choice for gardens in temperate climates, *Fargesia robusta* grows 10 to 15 feet tall with culms that start off green and turn yellow as they mature.

FACTS ON FLOWERING

The flowering of bamboos is perhaps the most misunderstood aspect of the plant group. Unlike most plants, the majority of bamboos live for decades before flowering. Because the intervals between flowering are so long, researchers don't yet have reliable data on the mechanics of flowering and whether the intervals are consistent within individual species. Some species are in flower very briefly; others bloom for weeks or months.



Like other grasses, bamboo produces insignificant flowers.

and seeds, some clumps declined or died.

"Clumping bamboo in full flower doesn't have enough reserved energy stored in its rhizome system to survive, so the bamboo generally dies," says Noah Bell, general manager of Bamboo Garden, a retail and mail-order nursery in North Plains, Oregon.

Propagating such species by seed essentially resets the clock, and the resulting bamboos will have a long lifespan. "Given the investment and the time it takes to plant bamboo, it's advisable to find out as much as possible about the origins of the bamboo you are buying to ensure that it won't flower anytime soon," says Bell.

—J.B.

Wild Greens

BY CAROLE OTTESEN

Harvesting edible weeds from the garden makes weeding a much more satisfying experience.

NO, WILD GREENS are not a pro-environment political party. They are plants—okay, okay, weeds—that you can eat. My association with them began one fine spring morning some 40 years ago when an elderly man came into my Maryland yard and asked permission to cut poke.

Poke? Poke! An old Elvis song came to mind:

*Down in Louisiana
Where the alligators grow so mean
There lived a girl that I swear to the world
Made the alligators look tame
Poke salad Annie, poke salad Annie*

I followed him, mystified, to a fenced area along the road that had once been a paddock. He'd seen a mess of it growing the previous fall, reckoned it would be up about now. He pointed to a familiar weed I knew by its scientific name, *Phytolacca americana*, and indicated a tubular shoot with a gnarled finger. "You got to get it when it's like that—just a-comin' out," he said, slicing off the shoot with a pocket knife. "It's good eatin' but first, you got to boil it in two changes of water. It's poison, don't you know."

Poison! No wonder Elvis's poke salad Annie was mean. The old man left with a shopping bag full of it. "There's still plenty for you," he said. Not on your life, I thought.

Still, that spring as I fussed over my tiny lettuces and peas, I contemplated the irony of vegetables that grow tentatively, always at risk from drought or deer, slugs, or insects, while weeds like poke shoot up, robust and abundant. Of course, that's what makes them weeds.

The dictionary defines a weed as "any undesired, uncultivated plant that grows in profusion as to crowd out a desired crop, disfigure a lawn..." The phrase "disfigure a lawn" brings dandelions to mind.



Numerous common garden weeds make nutritious and tasty additions to the salad bowl.

DANDELION

Dandelions (*Taraxacum officinale*) were well known in ancient Egypt, Greece, and Italy and have been used in Chinese traditional medicine for many centuries. Early European colonists brought seeds to North America with them so they could grow dandelions for medicinal purposes, and the dandelions found conditions to their liking.

The dandelion's fall from grace began in the mid-20th century, when they became one of the primary targets of our national obsession with pristine, ping-pong-table lawns. Yet despite decades of herbicide spraying and back-breaking hand weeding, these indefatigable plants still pop up in yards in all 50 states, Canada, and Puerto Rico.

The genus name, *Taraxacum*, is derived from the Greek *taraxos*, meaning

“disorder,” and *akos* for “remedy.” Both roots and leaves have been used as a purifying tonic for the liver and immune system and as a mild diuretic, a phenomenon that gave rise to the French common name, *pissenlit*—literally, piss in bed.

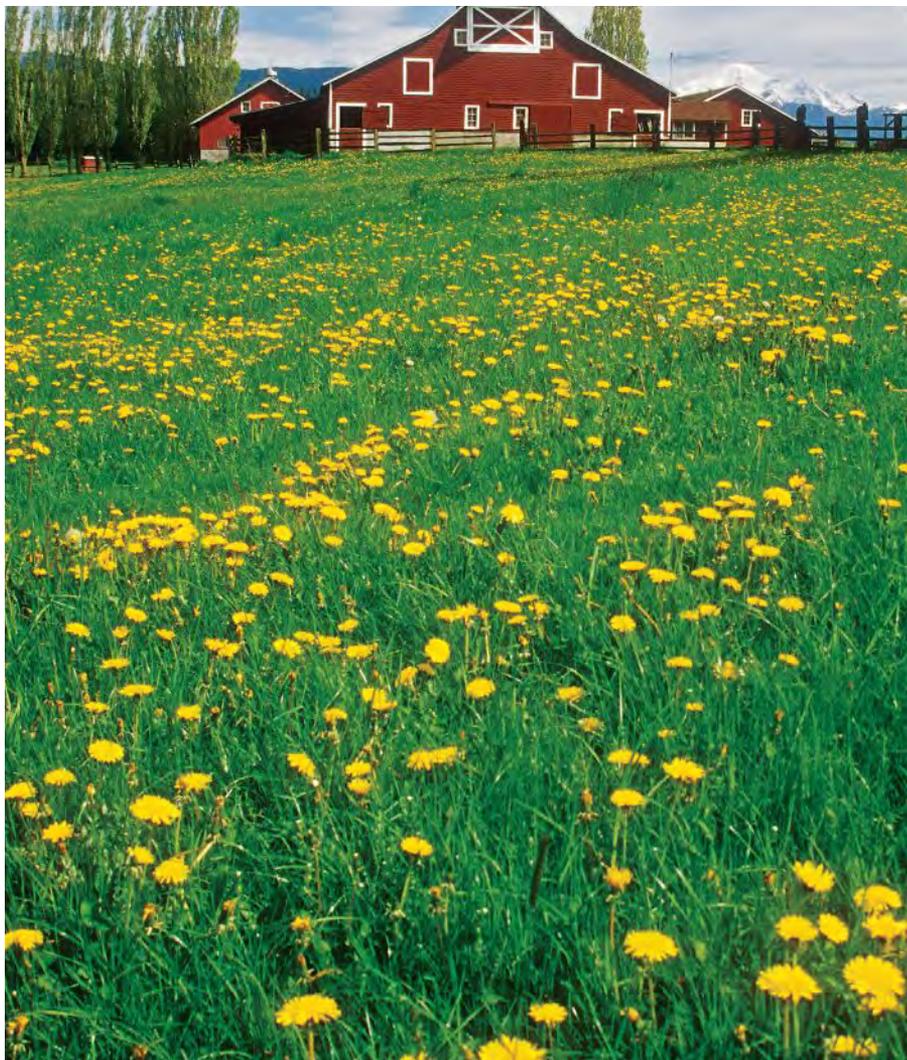
As well as substantiating earlier uses, modern research has found that chenodeoxycolic acid, a substance found in dandelions, dissolves cholesterol. Other studies suggest additional compounds in dandelions

While dandelions have not yet acquired the gourmet cachet they have in Europe, their popularity is growing, and dandelion farming has become a big business in the United States.

Vineland, New Jersey, has become the self-proclaimed “dandelion capital of the world,” and holds a Dandelion Festival each year to prove it. “Vineland is famous for dandelions because it was a huge crop here, planted by Italian immigrants who

TIPS ON GROWING AND HARVESTING WEEDS

- Always positively identify weeds before eating them. Once you learn them, you can forage anywhere. “Most wild gourmet garden vegetables are the same all over North America,” says wild food authority John Kallas of Portland, Oregon.
 - Avoid harvesting weeds from any site that may have been treated with pesticides, or that is so close to a roadway that plants may be tainted by car emissions or road runoff.
 - If you grow rather than forage for wild greens, give them the TLC you would any vegetable. Wild green seedlings thrive with light, air, nutrients, and room to grow. Enrich the soil with compost.
 - Greens such as nettles, lambsquarters, and purslane get tough when mature, so treat them as cut-and-come-agains. Trim them back regularly to encourage tender, new growth.
- C.O.



The distinctive yellow flowers of dandelions can be used to make dandelion wine.

lower blood sugar levels, stimulate immune cells, and retard tumor formation.

Dandelions’ nutritional profile rockets off the charts. Ounce per ounce, the leaves are higher in vitamin A than broccoli, carrots, or spinach. They contain potassium, iron, calcium, zinc, and vitamin E. And their vitamin C content was great enough to keep employees in the early days of Hudson’s Bay Company from developing scurvy.

established homes here,” explains Dawn Hunter, executive director of the Greater Vineland Chamber of Commerce.

Dandelion greens are increasingly available at both farmer’s markets and supermarkets, but why pay for them when you likely have plenty of them already in your garden? Gather the leaves during mild spells in winter or in the cool months of spring or fall when they are

putting out new growth and before the plants flower. The flavor of the leaves, akin to sharp-flavored lettuces like endive, becomes extremely bitter after bloom when the weather gets hot.

Mix the piquant young leaves with milder greens in salads. Add crumbled feta cheese, dried cranberries, or chopped apples. Or combine leaves with other greens and sauté them in olive oil with a dash of balsamic vinegar or lemon juice. The flower buds and roots are also edible, and of course the flower petals have long been used to make dandelion wine.

LAMBSQUARTERS

Like dandelions, lambsquarters (*Chenopodium album*) are an ancient food. The Vikings ate them and left a recipe for them, “Kokt Svinmatta.” Grown in Europe since the Bronze Age, their leaves are a rich source of vitamins with 349 percent of the daily requirement for vitamin A and 111 percent for vitamin C, as well as folate, calcium, iron, protein, and dietary fiber. But they fell from favor when spinach, with larger leaves and shorter stems, arrived from Asia in the 16th century.



Unlike spinach, lambsquarters—sometimes called goosefoot for the shape of the leaves—don't peter out when the weather warms. That's when they take off, soaring to as much as six feet in rich, moist soil, but more commonly reaching three feet.

You can prolong the production of new leaves by harvesting frequently, or simply lopping off old stalks to stimulate new growth. The small young leaves, and sometimes the stems, are coated with a mealy white dust, giving them a gray cast.

Interchangeable in recipes calling for spinach, lambsquarters excel in a Gruyere

A fast-growing annual weed, lambsquarters produce leaves that can be used like spinach in a wide variety of recipes.

cheese-charged white sauce as a filling for crêpes. Or use them in a quiche or frittata alone or mixed with other greens. Stir fry them or mix them with ricotta cheese to make a filling for lasagna.

NETTLES

Nettles (*Urtica dioica*) start growing in early spring before most other plants, a trait that makes them popular in cold places. Eating them is a spring rite in northern lands such as Ireland, Scotland, and Scandinavia.

Wherever they grow, it is with wild abandon. They spread by rhizomes and seed, and thwart eradication by stinging when touched. "Stinging nettles" raise ferocious welts on those with particularly sensitive skin. For these reasons, few people tolerate them in gardens, but they are easy to find growing wild just about anywhere—especially on woodland edges and in vacant lots. On the West Coast there is a regional strain identified as *Urtica dioica* var. *californica*, that is just as stingy and edible as the species.

Despite their bad rap, nettles are nutritional superstars, containing more than 25 percent protein as well as calcium, magnesium, potassium, selenium, zinc, and vitamins A and C. Herbalists value their medicinal qualities, particularly as a remedy for cystitis and for treating immune response disorders such as arthritis.

Harvest nettles carefully, using thick gloves, but be assured they lose their sting as soon as they are cooked. "To me," says wild edibles authority John Kallas, director of Wild Food Adventures in Portland, Ore-

gon, “nettles are a replacement for any green in any recipe. They’re wonderful in lasagna.”

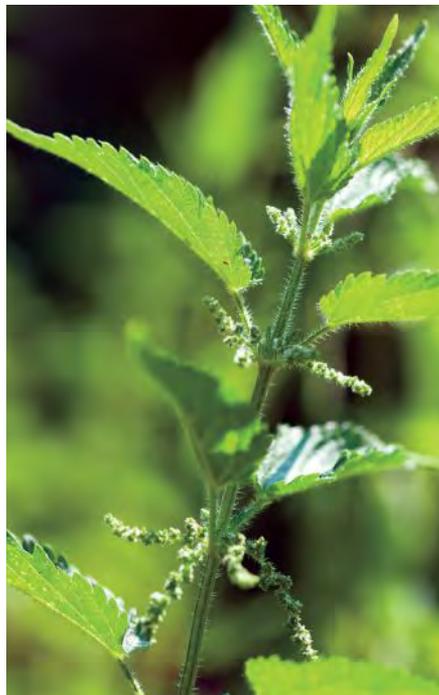
Recipes for nettle soup abound. I find they taste bland, so I like to mix them with lambsquarters, dandelions, collards, or kale in a mess of cooked greens. Be sure to use only young leaves. Eating the older leaves, says Kallas, “is like chewing on rope—even when they are cooked well.” This is not surprising, as nettle stalks were once used for making rope and a linenlike cloth.

CHICKWEED

Another common wild green with nutritional value and a long history is chickweed (*Stellaria media*). An annual, it is one of the earliest greens available at the cool extremes of the growing season, often visible poking through snow in winter thaws. Chickweed is one of the most widespread weeds, occurring throughout the world’s temperate and Arctic regions.

The common name derives from the fact that birds find it delectable. During Elizabethan times, it was fed to falcons. People still offer it to caged birds as a tonic, rich in vitamin C and phosphorus.

Chickweed is good for people, too. It has a nutritional content and cooked flavor comparable to that of spinach and a medicinal tradition that dates to antiquity. The Greek physician Dioscorides recommended it for eye and ear inflammation. Throughout history, it has been used in poultice form to treat inflammation and



Gardeners may avoid nettles because of their sting, but once cooked, the plants lose this unpleasant trait.

ulcers, and is still effective, crushed and applied to itchy, irritated skin. A tea from the entire plant yields a soothing drink for colds and flu. According to herbalists, chickweed contains saponins that emulsify fats, which may account for its use in folk medicine as a remedy for obesity.

Chickweed is delicate with small—about half an inch long—spoon-shaped leaves that

are rather widely spaced on prostrate stems. This tendency to sprawl makes harvesting difficult. Pinch the tips of young plants for a steadier supply of shorter, more upright greens. This will also delay formation of the tiny white flowers.

Chickweed favors moist, rich soil and is very easy to identify. A line of fine hairs runs down only one side of the stem until it hits a leaf, then switches to the other side. Eat it raw as a pretty addition to salads or blended with basil or parsley as part of an excellent pesto. In her book *Backyard Foraging*, Ellen Zachos suggests it’s “an excellent substitute for sprouts or shredded lettuce” on sandwiches.

PURSLANE

In the same family as chickweed, purslane (*Portulaca oleracea*) is a succulent annual weed that favors hot, sandy soil. It is frequently found in the cracks in sidewalks in midsummer at precisely the time when many other greens disappear or become too bitter to eat. The spoon-shaped mucilaginous leaves and round, succulent stems comprise the greatest source of omega-3 fatty acids in the green world. Purslane also contains more beta-carotene and six times more vitamin E than spinach, along with iron, high levels of magnesium and potassium, and vitamins C and A.

Purslane’s primary use throughout history and the world was as a food plant. Ancient Egyptians prized it, and it is still



Chickweed (above) and purslane (right) are both low-growing annual weeds, but the former thrives in cool, moist conditions, while the latter prefers it warm and dry.

used in traditional dishes in India and the Middle East. Although it wasn't grown in Europe until about the 16th century, by the mid-18th century, Martha Washington was pickling it in the New World. Mexicans call it *verdolaga* and use it in soups, tortillas, and omelets. And, mixed in equal parts with sorrel (*Rumex acetosa*), purslane is an okralike component of the classic French *bonne femme* soup.

Young purslane leaves and shoots enliven salads with a citrusy tang. Older shoots and leaves are fine as a potherb, and

a few cooks still pickle them for winter salads. Some people plant purslane or golden purslane (*P. sativa*), which has larger yellow leaves and grows more upright. Others find just enough wild plants in cracks in the sidewalks and along the patio to enjoy for summer meals. As weeds go, purslane is generally well-behaved.

A WEED YOU LOVE TO HATE

A European native biennial, garlic mustard (*Alliaria petiolata*), is a nuisance in gardens, but its real threat is as an escapee

just the stems and leaves, to prevent the plants from regrowing.

Garlic mustard's flavor is a robust blending of its namesakes. Add it raw to hearty sandwiches, include it in pesto, or let its lusty flavor star in a stuffing for pork roast or roast beef. Or, lightened up by mixing with lambsquarters or spinach and onions, it makes an excellent side dish for lamb.

GRAZING THE GARDEN

There is beautiful economy in weeding the garden and in so doing, putting tasty and

Resources

Backyard Foraging by Ellen Zachos. Storey Publishing, North Adams, MA, 2013.

The Encyclopedia of Edible Plants of North America by Francois Couplan and James A. Duke. Keats Publishing, New Canaan, CT, 1998.

Feasting Free on Wild Edibles by Bradford Angier. Stackpole Books, Mechanicsburg, PA, 2001.

The Herbal Epicure by Carole Ottesen. Ballantine Wellspring, NY, 2001.

Edible Wild Plants: Wild Foods From Dirt To Plate by John Kallas, Gibbs Smith, Layton, UT, 2010.

The Wild Vegetarian Cookbook by Steve Brill. Harvard Common Press, Boston, MA, 2002.

Seed Sources for Wild Greens

Baker Creek Heirloom Seed Co., Mansfield, MO. (417) 924-8917. www.rareseeds.com.

■ Nettles, others.

Garden Medicinals and Culinaries, Earlsville, VA. (434) 964-9113. www.gardenmedicinals.com.

■ Dandelions, garlic mustard, nettles, purslane.

Richters Herbs, Goodwood, ON, Canada. (905) 640-6677. www.richters.com.

■ Lambsquarters, nettles, dandelions, purslane.

Southern Exposure Seed Exchange, Mineral, VA. (540) 894-9480. www.southernexposure.com.

■ Purslane



Highly invasive garlic mustard was first introduced from Europe as a food plant. Its strong-flavored foliage should be harvested before its flowers appear atop its stems in spring.

in natural areas. In North America, garlic mustard is a noxious invasive throughout the eastern half of the continent, as well as in many central and western states. In rich, moist, shady places, it spreads swiftly, crowding out native understory plants.

Given that garlic mustard is highly nutritious—full of vitamins along with iron, calcium, and omega-3 fatty acids—it is doubly satisfying to pull and eat this plant. The most tender, best-tasting leaves are the first-year rosettes and the small, scalloped leaves on the stalk, harvested before the terminal clusters of white flowers develop. If you are foraging in the wild, pull as many plants as you can, being sure to remove the roots, not

nutritious foods on your table. Once you start harvesting wild greens, you may find your views of vegetable gardening altered.

You may never grow spinach again, instead choosing to pick the lambsquarters that arrive on their own. You may never again bother raising endive when dandelion greens are readily available. And on those long January evenings, instead of poring over seed catalogs you may choose to read about other weedy and wild candidates—such as fiddlehead ferns, sorrel, prickly pear cactus, and kudzu—for future culinary efforts.

Weed gourmand Carole Ottesen is a contributing writer for *The American Gardener*.



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Making Pest and Disease Control More Effective

by Scott Aker

HOW DO YOU cope with the inevitable insects, diseases, and weeds that threaten the beauty and productivity of your garden? Some gardeners are willing to take whatever measure is necessary to keep their favorite tree, shrub, or perennial in good health, but more and more say they rarely use pesticides, and others avoid them completely. After years of experience diagnosing garden problems for homeowners, I find most of us can be more efficient and effective if we pay more attention to the cues nature gives us before we react.

CONVENTIONAL

Gardeners who tend toward a conventional approach of using synthetic pesticides often seek perfection—such as flowers for show competitions—or have amassed collections of plants that simply cannot be replaced—such as decades-old bonsai—and have little tolerance for any type of plant damage. They are aware of the main pest and disease threats that their plants face, and are willing to spend hours treating them with pesticides if necessary. In some cases, they may be guided by a schedule that dictates what their plants need to be sprayed with and when—just in case an insect pest appears or weather conditions favor a disease.

Those who practice conventional pest control can, in most instances, refine their program to save time and money by relying less on the calendar and more on what is actually happening in the garden. For instance, they can skip treating their roses

with fungicide if there is a long stretch of dry, sunny days. Similarly, there is no need to treat for pests that are not present at the moment. With more frequent and careful monitoring, these gardeners may be sur-

prised at how much spraying can be eliminated without compromising their plants. When they feel they must spray, they are more likely to try folk remedies and homemade concoctions that they deem safer than commercially available products.



Designed by Rosalind Creasy and Green Willow Gardens, Marva and John Warnock's organic backyard garden in Northern California incorporates a variety of ornamental and edible plants.

prised at how much spraying can be eliminated without compromising their plants.

ORGANIC

On the other end of the spectrum are organic gardeners who have sworn off synthetic pesticides entirely. They focus on improving the foundation of the garden—soil—by incorporating large amounts of organic matter and using cover crops. When plants are attacked by pests or afflicted with diseases, these gardeners can tolerate a great deal of damage. They'll do almost anything to avoid spraying, including the removal

Like those who follow conventional practices, organic gardeners can benefit from more purposeful observation of the plants in their garden, with an eye to spotting problems early. Most organic approaches to pest control work best if applied before damage has occurred, so monitoring is key. It's also helpful to consider how effective a control measure might be before investing heavily in it. For example, many of the beneficial insects that can be purchased for release in the garden to control pests—such as ladybugs to control aphids—provide little long-term benefit because the “beneficial” insects won't stick around. Conservation

of existing beneficial insects by creating a hospitable environment for them is much more effective. With home remedies such as garlic and hot pepper sprays, it is difficult to determine whether they work unless you make careful observation of the extent of the problem before and after the treatment. You also need to be familiar with the life cycle of the pest or disease you are dealing with to be sure that the problem did not simply resolve itself because of a completed life stage or change in weather conditions.

Be aware that even organic pesticides such as rotenone or pyrethrum come with their own concerns. Rotenone has been implicated in the development of Parkinson's disease, and pyrethrum kills bees and has been linked to development of allergies in some people.

INTEGRATED PEST MANAGEMENT

In the middle of the road, we have those who practice Integrated Pest Management (IPM), a concept originally developed for agricultural use that has been adopted by home gardeners. In an IPM program, science-based solutions are applied in accordance with detailed observation, data collection, and accepted levels of tolerance for the presence of a given pest or disease.

IPM gardeners regularly check their plants for insects and consult weather forecasts to know when diseases are likely to develop. They maintain sticky yellow cards and other devices in their yard to monitor the presence of insect pests, and they have thoroughly investigated every pesticide they use, categorizing them in terms of their toxicity and holding them as a last resort when all other control efforts have failed.

No matter how much monitoring they do, however, they will at some point fail to recognize and deal with a major pest or disease problem. IPM practitioners can enjoy their gardens more if, rather than focusing on the pests and diseases, they gain a deeper knowledge of how insects and microorganisms, good and bad, fit into the entire ecosystem. They might strive to do more soil preparation to stack the odds in the plant's favor.

CHANGE IS INEVITABLE

In the time I have spent working in horticulture, these three pest and disease management philosophies have begun to converge and overlap.

Gardening Q&A with Scott Aker

IN SEARCH OF PLANTS FOR WINTER CONTAINERS

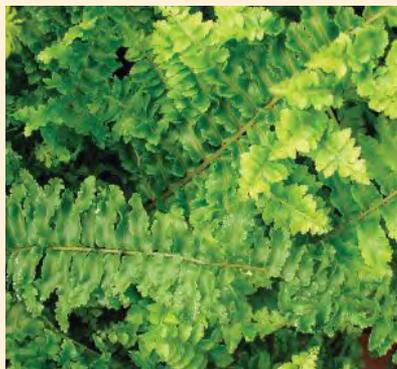
I've really enjoyed my container garden all season, but everything is gone after the first frost and I'm tired of pansies and kale. My containers hold about 20 gallons of soil and I live in USDA Hardiness Zone 5. What can I grow in them in winter? I'm looking for something tall but don't want it in the containers over the summer.

You should limit yourself to plants that are hardy to Zone 3 or 4 because container plants always experience more extreme temperatures than those grown in the ground, where the mass of soil provides considerable insulation. While there are many perennials that are hardy in these zones, they are usually dormant in winter and won't provide much of a seasonal display.

Your best bet is to cut branches of evergreens, such as conifers and hollies, and arrange them in the pots. They will look good for several weeks before you need to replace them with fresh branches.

FERN DROPS LEAVES INDOORS

I have a Boston fern that does well out on the porch each summer, but when I bring it indoors for winter, it sheds tons of leaves. What can I do to stop this?



Ferns like high humidity, so it's the low humidity and decreased light intensity of the indoor environment that causes the fronds of your fern to dry and fall off. Give the plant as much sunlight as possible while it is indoors, and keep it as cool as you can. It's a good idea to put ferns on a large tray filled with pebbles and water to keep the humidity higher around the plant. Keep the water level just below the bottom of the pot so the soil doesn't get waterlogged. —S.A.

Send your gardening questions to Scott Aker at saker@ahs.org (please include your city and state with submissions).

Those who have espoused conventional control methods have had to adapt to new realities. Many of the pesticides in their arsenal in days past are simply not available anymore. A few once-reliable chemicals became ineffective as fungi, mites, and insects became resistant to them. New problems that cannot be managed with pesticides, such as rose rosette disease, have appeared, necessitating consideration of other control options.

The organic approach has become more refined, with an emphasis now on research aimed at developing organic systems for all kinds of crops. Once a fringe movement, organic gardening has turned into a mainstream business. Organic gardeners have more pesticides available for their use as essential oils and fungal derivatives are developed against pests and diseases.

At the same time, some IPM folks have begun to acknowledge the need for a more holistic approach by including all the parameters of plant growth in their program instead of just targeting pests and diseases. Some horticulturists have even been using other terms such as Total Plant Management (TPM) to express their expanded interest in soil health and garden ecology.

If you are like me, your approach does not fit neatly into one philosophy. We should accept the fact that we can never control every problem that comes our way, and we should strive to learn from other gardeners who might do things differently than we do.

Scott Aker is head of horticulture and education at the United States National Arboretum in Washington, D.C.



Luscious Lemongrass

by Kris Wetherbee

IF YOU ENJOY the citrusy scent of fresh lemons, you will love growing lemongrass (*Cymbopogon citratus*) in your garden. The graceful, arching leaves release a strong lemony fragrance when cut or bruised. Best known for its use in herb teas and in Thai and Vietnamese cuisine, the bulbous base and tender lower parts of its stem have a delightful, milder lemon flavor with a hint of ginger and grassiness, but without any of the acidity.

GROWING GUIDELINES

Lemongrass is a two- to four-foot-tall, clump-forming grass. Some researchers suspect it is originally native to Southeast Asia, where it has a long history of culinary use, but it is widely distributed in tropical regions worldwide. Of the more than 50 species in the genus *Cymbopogon*, two are used for culinary purposes—West Indian lemongrass (*C. citratus*, USDA Hardiness Zones 9–11, AHS Heat Zones 12–1) and East Indian lemongrass (*C. flexuosus*, Zones 9–11, 12–1). West Indian lemongrass is the most popular because its stalks are larger and more bulbous at the stem base.

Both lemongrass species can be grown as perennials in USDA Hardiness Zones 9 to 11 and even may survive winters in Zone 8 if heavily mulched in late fall. In cooler zones, lemongrass is best grown as an annual, or



The citrus-scented leaves and stems of lemongrass are essential in Southeast Asian cuisine.

Sources

Goodwin Creek Gardens, Williams, OR. (800) 846-7359.
www.goodwincreekgardens.com.

Johnny's Selected Seeds, Winslow, ME. (877) 564-6697.
www.johnnyseeds.com.

Richters, Goodwood, Ontario. (905) 640-6677. www.richters.com.

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

treated as a tender perennial and brought indoors before the first frost. In fact, lemongrass looks great in containers, whether spending the warm season outdoors or winter indoors near a large sunny window.

For optimal growth, plant lemongrass in full sun in rich, free draining, neutral to slightly acidic soil kept consistently moist during the growing season. Digging in a two- to six-inch layer of shredded leaves, compost, or other organic material will help improve drainage; soil that doesn't drain well will quickly kill plants.

Lemongrass is a moderate feeder. Improve soil fertility by incorporating ad-

ditional compost, well-rotted manure, or earthworm castings to the soil prior to planting. During the growing season, topdress the soil with an organic fertilizer or apply liquid fertilizer or manure tea every few weeks.

I've grown lemongrass in both containers and in the ground in my Oregon garden (USDA Zone 7b). A well-cared-for plant in the ground will grow to maturity in a single season, but since I'm seldom successful overwintering it outdoors, I dig up a few stalks to bring indoors for winter. The key is to trim the stalks so they are only a few inches tall, then plant them in

smaller pots to overwinter in a bright, east- or south-facing window. The plants won't actively grow, but the roots will be ready to go in the ground come spring.

Plants that have been growing for more than a year may become crowded and less productive. They can be divided in spring by digging up or unpotting the clumps and breaking them into smaller ones, ensuring that each section has roots so they can be replanted.

PESTS AND DISEASES

Few pests bother culinary lemongrass, likely because it contains strong-smelling essential oils. Diseases that do occur, such as rust, are usually caused by unfavorable growing conditions, especially soggy soil or poor air circulation. The solution is to improve drainage, lighten clay soil with lots of organic matter, or grow plants in containers filled with a lightweight commercial potting mix that drains well. Another benefit of container plants is that they can be moved to areas that receive better ventilation, if needed.

ENJOYING THE HARVEST

Each lemongrass plant can produce from six to 12 or more harvestable stalks at maturity. You can begin harvesting as soon as plants are a foot tall and the stem's base is a half inch thick. Make sure to cut below the white swollen end; the remaining stem will

GETTING STARTED

Lemongrass can be started from seed, but using transplants brings faster and more successful harvests in most regions. Look for seedlings at garden centers or online sources (see "Sources," opposite page). Seedlings can be planted outdoors once soil has warmed to at least 60 degrees Fahrenheit.

Alternatively, you can start your clumps from stalks (shown right) bought at a supermarket, Asian market, or farmer's market, preferably with a few little roots attached. Root the stalks by trimming off the top few inches and then putting the base in an inch or two of water. Change the water every two or three days; the roots will form within a few weeks. Well-rooted stalks can then be planted.

—K.W.



resprout as long as you cut it back to just above the soil line. For best results, wait until several stems have formed and simply break or cut off a couple at a time as needed.

The stalk itself is very tough. For cooking, remove a couple of the outer fibrous layers to get to the prime bulbous base and white to purple inner core. You can save the tough parts to flavor liquids. If you harvest more lemongrass than you can use at once, you can store the stalks in plastic bags in the freezer for several months. For longer-term storage, the stalks can be dried.

The finely chopped base and inner core of lemongrass can be used in mari-

nades, fish and poultry dishes, stir-fries, and curries. The entire stalk can be chopped or bundled and used fresh or dried to make an herbal tea. Put chopped leaves in a muslin bag or giant tea ball to infuse the flavor into soups, stews, or rice; remove the muslin bag or tea ball after cooking is done. Lemongrass can even be used to flavor cookies, milkshakes, and other sweet treats. Once you've grown lemongrass yourself, you are sure to find many other ways to enjoy it.

Kris Wetherbee grows lemongrass in her garden in Oakland, Oregon.

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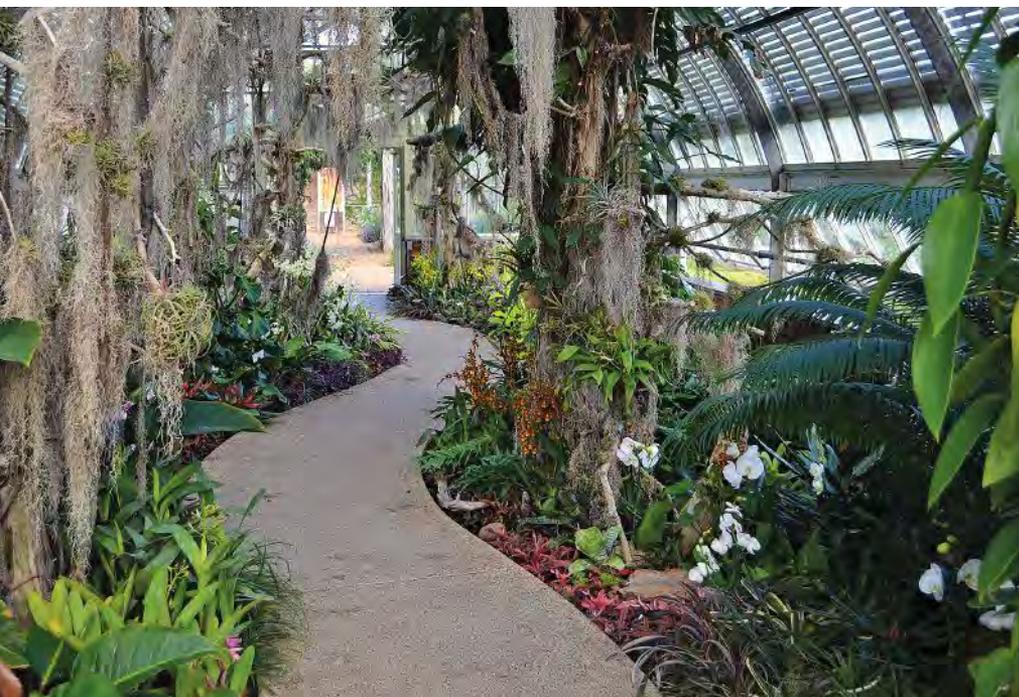
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Shangri La Botanical Gardens & Nature Center

by Lynn Brinkley



Top: The cypress-tupelo swamp of the Adams Bayou borders the botanical garden. Above: Spanish moss, orchids, and other tropical plants thrive in the century-old Epiphyte House.

FOR A garden named after an earthly paradise, Shangri La Botanical Gardens & Nature Center in Orange, Texas, has had to go through a number of daunting challenges to become what it is today. The first incarnation of Shangri La originated with Henry Jacob Lutchter Stark, the scion of a family that established a lucrative lumber company in Orange in the late 1800s.

Stark began his private garden in 1937, naming it after the utopian setting in James Hilton's 1933 novel, *Lost Horizon*. Stark's vision of paradise included both an oasis in his collected azaleas and camellias and the preservation of a cypress-tupelo swamp—a natural community indigenous to the Gulf Coast—which flanked his home. "At a time when an interest in protecting the environment was not in vogue, Mr. Stark created Shangri La to be a place where people could live in harmony with nature," says Rick J. Lewandowski, Shangri La's current director.

WEATHERING THE YEARS

Beginning in 1946, Stark opened his private garden to public viewing each spring. Thousands of people came to see his impressive azalea collection in full bloom, along with many other colorful tropical and subtropical plants. The garden suffered its first major setback in 1958, when a devastating snowstorm killed most of the plants. Shangri La subsequently closed, not to be reopened for 50 years.

Stark died in 1965, but he and his wife, Nelda, had established the Stark Foundation a few years prior to his passing. For decades, the foundation supported projects that benefited southeast Texas communities, but it wasn't until 2002 that the foundation set a goal of restoring Shangri La and showcasing the property's nearby ecosystems for educational purposes. Work was set to begin in 2005, but di-

PHOTOS ON THIS PAGE AND OPPOSITE COURTESY OF SHANGRI LA BOTANICAL GARDENS & NATURE CENTER



Surrounded in spring by blooming azaleas, the iconic Cypress Gate overlooking the Pond of the Blue Moon is made from the logs of cypress trees salvaged in the aftermath of Hurricane Rita, which devastated much of the Gulf Coast of the United States in 2005.

saster struck when Hurricane Rita blew through and destroyed more than 50,000 trees on the Stark property alone.

To make the best of the situation, Shangri La's planners repurposed the fallen trees for other uses within the redevelopment project. The garden finally opened to the public in 2008, but was again struck by an extreme weather event with flooding from Hurricane Ike in September that year, causing it to close for further renovation until March 2009.

PARADISE FOUND

At 252 acres, the contemporary Shangri La serves a dual purpose as both a horticultural display and as a wetland habitat. Its **Discovery Theater** and **Nature Center** are LEED-certified buildings—Shangri La was the first facility in Texas to be certified as a platinum level project by the U.S. Green Building Council. These modern facilities complement the nearly 100-year-old **Epiphyte House**, which Lewandowski calls “the jewel of the three greenhouses that make up the Exhibition Greenhouses.”

Visitors may also explore the nature-inspired sculpture gardens, children's and edible gardens, and an ever-changing perennial border filled with a wide range of plants that are well adapted to the region's climate. A wetland demonstration

garden features aquatic plants that serve as a biofilter for water from nearby Ruby Lake. This 15-acre manmade water feature provides vital habitat to 5,000 migratory

birds each year, along with numerous turtles, fish, and alligators.

Among the staff's favorite spots is the **Pond of the Blue Moon**. In addition to being “a relaxing space to enjoy views of the garden,” Lewandowski says, “this is one of the best places to view the azaleas in bloom in March.” More than 40 varieties of azaleas, many of which represent the older varieties Stark grew, put on a dazzling show each spring.

In addition to these cultivated landscapes, Shangri La offers a wilder version of paradise, represented by a “complex matrix of wetlands, bayous, and swamps that are extremely important habitat for a wide range of aquatic and terrestrial wildlife,” says Lewandowski. Boat tours through Adams Bayou, which borders the property and its cypress–tupelo swamp, allow visitors a close-up view of these fragile coastal ecosystems and the creatures they support. A highlight of these tours is a visit to the **Survivor Tree**, a pond cypress (*Taxodium ascendens*) estimated to be more than 1,200 years old.

Thanks to Stark's original preservation efforts and to those who sought to build upon his vision, Shangri La remains a paradise for all to enjoy. 

Lynn Brinkley is an editorial intern with The American Gardener.

Additional Information

Shangri La Botanical Gardens & Nature Center

2111 W. Park Avenue, Orange, TX 77630.
(409) 670-9113. <http://starkculturalvenues.org/shangrilagardens>.

- Hours: Open year round
Tuesday–Saturday, 9 a.m.–5 p.m.
- Admission: Adults (ages 18–64) \$6; seniors (age 65 and up) and youth (ages 10–17) \$5; Children (ages 4–9) \$2
- Shangri La Botanical Gardens & Nature Center participates in AHS's Reciprocal Admissions Program. AHS members showing a current membership card receive free admission.

Other nearby sites to explore:
Houston Arboretum & Nature Center,
www.houstonarboretum.org.
Mercer Botanic Gardens,
www.themercersociety.org/visit.
Orangefield Cormier Museum,
www.orangefieldisd.com.

Horticultural News and Research Important to American Gardeners

BERRIES FOR THE NEW YEAR

Just in time for the 100th anniversary of the first appearance of highbush blueberries on the market, the U.S. Department of Agriculture (USDA) Agricultural Research Service is releasing a new cultivar called 'Baby Blues'. The



'Baby Blues' blueberry



'Columbia Giant' blackberry

first harvest from agriculturally viable blueberry varieties—as opposed to wild ones—occurred in 1916. Since then, the USDA has developed scores of varieties geared toward both commercial cultivation and home gardeners.

"'Baby Blues' is a vigorous, high-yielding, small-fruited, machine-harvestable highbush blueberry with outstanding fruit quality," says Chad Finn, a USDA geneticist at the Horticultural Crops Research Unit in Corvallis, Oregon, who focuses on berry crops. "It may thrive in milder areas where northern highbush blueberries are grown," he adds. Releasing concurrently is 'Columbia Giant' a blackberry cultivar that Finn also developed. Its thornless, trailing brambles produce very large, firm fruit with a sweet flavor, and it is adaptable to regions where other trailing blackberries are grown, particularly in the Northwest.

UNRAVELING SPRING FLOWERING TRIGGERS

After a long winter, it can be heartbreaking to gardeners when a spring cold snap zaps flower buds before they can open. Some plants use vernalization—a process that enables them to delay flowering until weather conditions warm sufficiently—to avoid this. Scientists have been studying how vernalization works for decades, and have recently discovered a key piece of the puzzle.

Researchers knew that a specific gene, called Flowering Locus C (FLC), represses flowering throughout the cells of the plant until warmer weather starts. As the temperature rises, the plant gradually produces proteins that deactivate this gene and allows flowering. No one knew exactly how this process worked, however, until a team at the John Innes Centre for Plant Science and Microbiology in Norwich, England, found the answer with the help of some mutated *Arabidopsis* plants that did not flower.

While investigating why these plants failed to bloom, the researchers discovered they lacked the piece of DNA in their FLC genes that recognizes VAL1, the key protein that deactivates FLC and allows the plant to flower. This research, published in the journal *Science* in July 2016, "provides the first glimpse of how regulators in a cell identify which target genes to switch off," explains Caroline Dean, lead scientist on the study. "A specific sequence is recognized and without this sequence FLC won't be suppressed and the plant will never flower."

These findings may help in the development of plants that better tolerate climate change. For more information, visit www.jic.ac.uk/news.

BURPEE DONATES \$2.5 MILLION TO PRESERVE WHITE HOUSE KITCHEN GARDEN

The arrival of new residents at the White House often signals sweeping changes not only in policy, but in the look, style, and



Many plants, such as this witchhazel (*Hamamelis virginiana*), use vernalization to time flowering after the weather begins to warm in late winter and early spring.

LEFT (2); COURTESY OF USDA-ARS. RIGHT: VIVEKA NEVELIN



Plants await fall harvesting in the White House Kitchen Garden, which recently added this gathering space with a table and benches crafted from numerous types of wood.

focus of the buildings and grounds. One of the notable additions to the grounds during the administration of President Obama was the White House Kitchen Garden, championed by First Lady Michelle Obama. Planted in 2009, it was the first kitchen garden on the White House grounds since Eleanor Roosevelt's Victo-

ry garden during the Second World War.

Recently the W. Atlee Burpee & Company announced it would provide \$2.5 million in funding to the National Park Foundation, which oversees the White House Garden, to ensure maintenance of the vegetable garden over a 17-year period. "Everyone at Burpee is proud of

the First Lady's 'Can-Do!' attitude," says George Ball, chairman and CEO of the Pennsylvania-based seed and plant supplier, "and we hope that a well-conceived, long-lasting version of the White House Kitchen Garden will be fully supported by ensuing administrations."

More information on the White House Kitchen Garden is available at www.whitehouse.gov/interactive-tour/kitchen-garden.

NEW NAMES FOR FAMILIAR GARDENS

In 2014 the Cleveland Botanical Garden and the Holden Arboretum in nearby Kirtland, Ohio, announced a merger. Following a rebranding effort, the joint entity announced recently it will move forward under the umbrella name of Holden Forests & Gardens. This new name is intended to link the mission and goals of both the 10-acre urban botanical gardens and the more rural 3,600-acre arboretum. Though these two sites represent very different landscapes, they share the common goal of public access to, and greater interaction with, green spaces in the greater Cleveland area. Learn more on Holden Forests & Gardens' new website at www.holdenfg.org.



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Newly renamed Cornell Botanic Gardens in Ithaca, New York, encompasses the scenic F.R. Newman Arboretum.

In a similar move, Cornell University in Ithaca, New York, announced in October that its arboretum, botanical garden, and 3,500 acres of natural area will now be known as Cornell Botanic Gardens. The site had been known as Cornell Plantations since 1944. The new name is intended to better represent it as a public garden that welcomes visitors to campus. It also more accurately

reflects the gardens' mission, which includes ethnobotany projects on the "biocultural conservation" of plants central to cultures around the world. Visit www.cornellbotanicgardens.org to learn more.

GARDEN CONSERVANCY AIDS RESTORATION OF JENSEN GARDEN IN CHICAGO

After over a century of use and visitation, a historic Chicago garden completed in 1908 is in need of a makeover. Nestled in the city's Humboldt Park, the Jensen Formal Garden was designed by Jens Jensen, an influential American landscape architect who helped popularize the use of native plants.



Plans are underway to renovate the Jensen Formal Garden at Humboldt Park in Chicago.

Its circular design included flower beds filled with richly colored annuals and perennials. Created in the period when urban areas were becoming densely populated, it was intended to enrich the lives of those without gardens of their own. But over time the garden's infrastructure and plantings have slowly deteriorated.

To give the garden the attention it needs, the Chicago Park District and Chicago Parks Foundation have partnered with the Garden Conservancy, a national non-profit organization dedicated to preserving historically and culturally significant gardens. The plan is to replace or renovate the garden's pergolas, walls, and walkways. While emulating Jensen's original planting plan, annuals will be replaced with herbaceous perennials and grasses that offer wildlife habitat and interesting features in all seasons. The garden renovation also will include installation of new paths to make it accessible for persons with disabilities, along with new urns, benches, and a rehabilitated reflection pool.

News written by Editorial Intern Lynn Brinkley and Associate Editor Viveka Neveln.

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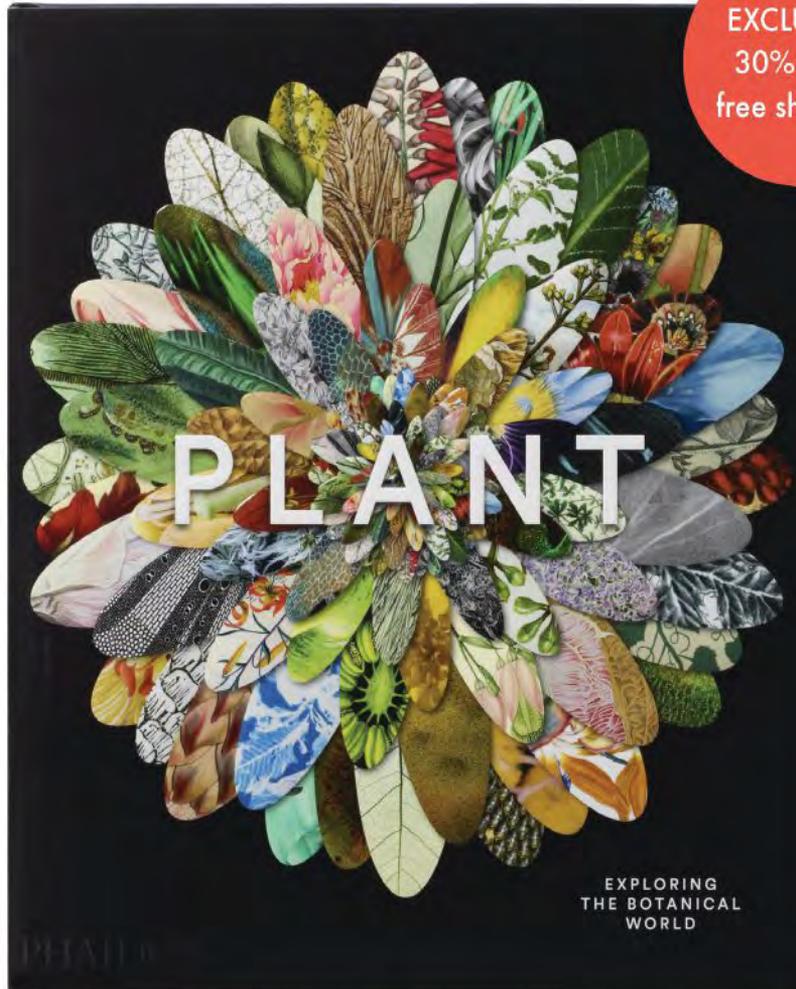
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LEFT: COURTESY OF CORNELL CHRONICLE; RIGHT: COURTESY OF CHICAGO PARKS FOUNDATION

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A Potpourri of Useful Products

by Rita Pelczar

AS WE put the final touches on another gardening season, I'd like to share a few of the products that made my gardens successful this year, plus one that will help me extend the season into the winter months.

Over the summer, I became acquainted with two new products from Good Dirt (www.good-dirt.com). I used **Good Dirt® Potting Soil Mix** to pot up some newly rooted cuttings of perennials



and shrubs. This mix has a light, fluffy texture and is easy to moisten without getting soggy. It is made from a blend of sustainably harvested peat moss, organic plant food, plant probiotics, and BogBits™—a recycled by-product from the North American peat bogs that adds great porosity. For in-ground plantings, **Good Dirt® Soil Conditioner** is a slightly coarser combination of the same materials that provides both improved drainage and water retention for newly planted trees, shrubs, vegetables, and flowers. It's a great amendment for my heavy North Carolina clay soil.

A good watering can is a garden essential, and the **French Blue Watering Can** from Gardener's Supply Company (www.gardeners.com) has become my



favorite. It's made of lightweight polyethylene and has a three-gallon capacity. The long, curved handle allows for a balanced, two-handed grip while you aim the flow, and its stainless steel rose is detachable for easy cleaning.

Newly sown grass seed needs even moisture to germinate and establish roots. Re-seeding bare patches in the lawn can be a chore, and keeping them watered can be equally tedious. **Seed Aide CoverGrow™** (www.profileproducts.com) is a nifty product that reduces the frequency



of watering. It's a granular mulch composed of wood fiber and cellulose fiber that is applied over a seeded area. Thoroughly moistened, the granules soak up water, expanding significantly in size. They shade the germinating seeds and gradually release water right where you

need it. This mulch can be applied by hand, or broadcast with a spreader for larger areas.

A pair of garden forks from Corona (www.coronatools.com) came in very handy this year for digging root crops, transplanting and dividing perennials, and spreading mulch. The **Four Tine**



Digging Fork is a workhorse, with sturdy 10-inch long, flattened, tempered steel tines and a 29-inch D-grip handle. It makes short work of digging potatoes or sweet potatoes and is ideal for prizing perennials out of the ground for transplanting. It's also handy for dividing clumps of perennial roots and incorporating organic matter into the soil before replanting.

The **10 Tine Ensilage Fork** is well suited for lifting and spreading organic mulch over your beds. Its business end is constructed of tempered, welded steel; the thin, rounded tines slide easily into a pile of mulch, lifting a good size scoop with each thrust. The 30-inch D-grip handle is made of ash wood.



Heated Birdbath

As winter approaches, my **Heated Birdbath** from Songbird Essentials (www.songbirdessentials.com), which I covered in the November/December 2015 issue of this magazine and is a favorite with my winter bird visitors, has been reconnected to an exterior electrical outlet. Because the attached cord is fairly short, an exterior extension cord is necessary, and to protect this connection from moisture, the **Heavy Duty Cord Protection** from Twist and



Heavy Duty Cord Protector

Seal® (www.twistandseal.com) is just the ticket. Useful for this or any other outdoor device that requires electricity, the sturdy, hinged plastic case prevents moisture from reaching the plugs. It comes with a five-year replacement warranty.

If you have a cold frame, you know that once the weather cools you have to regularly open the frame during daylight hours to prevent temperatures from rising and cooking everything inside, then remembering to close the lid at night to avoid frost damage. The **Univent Automatic Vent Opener** from Agriculture Solutions (www.agriculturesolutions.com) allows you

forget about these chores—and it doesn't need electricity. A substance inside the device expands and contracts depending on the temperature, causing it to move. It can lift lids up to 15 pounds and be adjusted to open when temperatures reach between 55 to 75 degrees Fahrenheit. Easy to install, it opens to a maximum of 18 inches and



Univent Automatic Vent Opener

is equipped with a quick-release mounting bracket that allows for easy access to your crops. With luck, you can have fresh salads all winter long!

Rita Pelczar is a contributing editor for The American Gardener.



NICE DIGS!

The OXO Good Grips Trowel is constructed of high-grade 420 stainless steel for strength and durability. It features a soft, non-slip handle with a gel insert that flexes to provide cushioning when digging into tough and compacted soil. Easy-to-read markings provide clear and convenient depth measurement and serrated edges tear through tough soil and weeds.



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Recommendations for Your Gardening Library

The Bold Dry Garden: Lessons from the Ruth Bancroft Garden

Johanna Silver, with photographs by Marion Brenner. Timber Press, Portland, OR, 2016. 236 pages. Publisher's price, hardcover: \$34.95.

EVERYTHING ABOUT the *Bold Dry Garden*, from the beautiful cover to the wealth of authoritative information it contains, will appeal to fans of succulents and other arid-region plants. But even if you have never planted a single cactus, you will be inspired by the story of Ruth Bancroft and her exemplary dry garden in Walnut Creek, California. This consummate gardener, now 108 years old, has spent more than 40 years building a diverse collection of succulents, shrubs, and trees from arid lands around the world.



Bancroft and her remarkable garden inspired the founding of the Garden Conservancy in 1988 “to preserve exceptional American gardens for the public’s education and enjoyment.” Through this organization, the Ruth Bancroft Garden is currently open to the public, and I was fortunate to visit it recently. Its lush beauty completely mesmerized me.

Reading this book’s detailed descriptions of the garden and examining the exquisite photographs was almost like a return visit. And the discussions of Bancroft’s planting strategies, her ideas of repetition, working with light and shade, and managing the wide ranging climate adaptation of plants gave me—already a desert gardener—a much greater understanding of what is possible despite a lack of water.

Even the captions for the plentiful photos are instructive and insightful, often going beyond the important task of naming species to clarify attributes that contribute to the beauty of each composition. For example, in a close-up shot of a group of small, round cacti, the caption reads, “*Parodia magnifica*, organized into neat rows of bristly spines topped with satiny flowers, creates a formal appearance.”

This book documents an important piece of American garden history that facilitated the introduction of numerous cacti and succulents to our landscapes. As I read through it, it often had me running outside to examine my own garden, looking for rock edges and niches, reimagining my planting design, and hunting potential spaces for plants that poke, swirl, send up rosettes of color, and rise high with sword-shaped leaves.

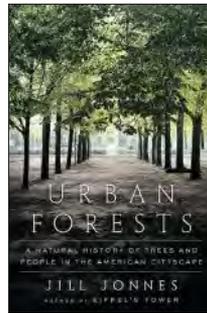
—Linda Larson

Linda Larson inspires others to visit gardens wherever they go through her blog, “A Traveling Gardener wandering, wondering, noticing” at www.travelinggardener.com/wordpress.

Urban Forests

Jill Jonnes. Viking, New York, NY, 2016. 394 pages. Publisher’s price, hardcover: \$30.

POUND FOR POUND (or tree for tree), the most critical trees on the planet are those in urban forests. That’s what I emphasize to my students in the Master Naturalist classes I teach, citing general factoids such as the savings of energy for heating and cooling, sometimes by up to 50 percent; provision of food, nesting sites, and cover to enhance urban biodiversity; filtration of air pollutants and urban particulates; and of course absorbing and converting up to 100 pounds of carbon dioxide per tree annually to fight global climate change. But when those students



ask for a book to find more information, I have been at a loss for what to recommend for a general, non-academic audience.

Along comes Jill Jonnes with *Urban Forests*, which contains some of the most readable and insightful arboreal prose I have ever come across. Jonnes dives deeply into trees and their roles in American cities through various eras of history. The text is laced with facts, dates, and figures gleaned from recent scientific studies that, rather than making one’s eyes glaze over, inspire a profound respect for these resilient trees and the people who champion them.

In addition to detailing the array of environmental benefits trees provide in urban areas, Jonnes deftly illustrates the impact of trees on the well-being of city-dwellers. A poignant example is how an old elm tree that withstood the Oklahoma City bombing in 1995 became an emblem of hope and healing to residents.

A spellbinding storyteller, Jonnes relates the heartbreaking stories of America’s most devastating arboreal tragedies—the annihilation of native elm, chestnut, and now ash trees by introduced pests and diseases. She counterbalances vivid scenes of entire neighborhoods being clear cut with the diligent efforts of the people trying to save these trees from extinction. Through these and other equally compelling anecdotes, the book elucidates the powerful emotional connection humans have with trees.

I found myself so enthralled that I was sorry to reach the end of the book. Fortunately, the 30-page bibliography that Jonnes calls “Notes” offers a lifetime of further investigation into the magical world of urban trees.

—Guy Sternberg

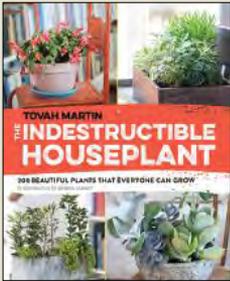
*A certified arborist, Guy Sternberg is the primary author of *Native Trees for North American Landscapes* (Timber Press, 2004). He lives in Petersburg, Illinois.*

GARDENER'S BOOKS

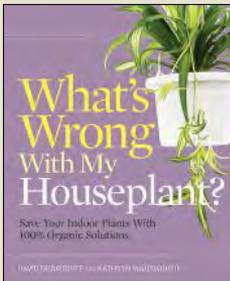
Indoor Gardening

No matter what the season or what's happening outside, plants can thrive in our homes year round. Space, or the lack of it, need not be a limitation. I've grown quite a few herbs on a kitchen windowsill, for example. All that is needed is a can-do attitude and the correct plants. You provide the spirit; these three books will help you plant for success.

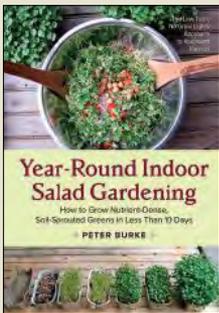
In *The Indestructible Houseplant* (Timber Press, 2015, \$22.95), Tovah Martin has weeded through the world of indoor plants to find over 200 options tough enough for anyone to grow. The key to success is Martin's thorough plant profiles, which include detailed information about the plant, suitable indoor growing conditions, and care for each plant. The friendly, approachable text is accompanied by photographs that will inspire experimentation. Another nice feature is the houseplant care calendar to help keep maintenance on track.



Sometimes, despite all your best efforts, a plant heads south. *What's Wrong with My Houseplant?* by David Dearnorff and Kathryn Wadsworth (Timber Press, 2016, \$24.95) is a go-to manual for diagnosing problems with indoor plants. Each of the 148 plant portraits, organized by plant type, notes common ailments and describes how to provide an optimum household environment. An illustrated rogue's gallery of pests and disease symptoms is accompanied by organic solutions for effectively dealing with them.



Peter Burke's *Year-Round Indoor Salad Gardening* (Chelsea Green Publishing, 2015, \$29.95) demonstrates how easy, fast, and tasty it is to grow nutrient-dense greens indoors. Burke describes his planting methods in detail, but he also provides a quick-start guide to those who would rather plant first and then get into the details. Either way, instructions are easy to follow. There are even recipes for how to use the resulting harvest of greens.



—Mary Chadduck
Special to The American Gardener



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GIFTS FOR THE GARDENER

Here are plant- and garden-themed gift ideas for all the gardeners on your holiday list—including yourself.



AHS Floral Mugs

Sip through the seasons with these bone china mugs adorned with charming flowers, berries, and leaves. Microwave and dishwasher safe, each mug holds eight fluid ounces and bears the AHS logo on the underside. Set of two for \$44.90 (including tax and shipping) or four for \$84.95. (703) 768-5700. www.ahs.org.



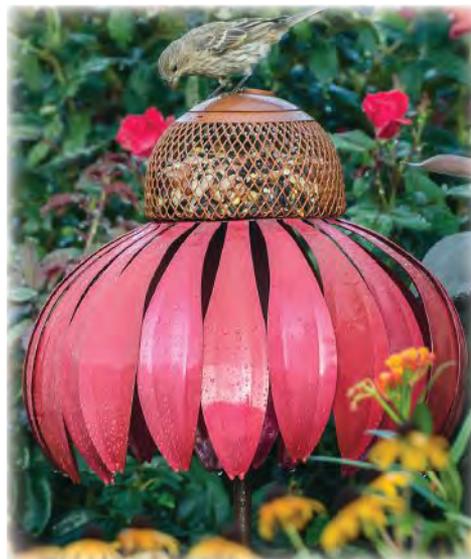
Women's Denim Gardening Gloves

Made of machine-washable stretch denim, these gloves feature padded, faux leather palms and adjustable wrist straps. Available in two sizes for \$34.95 from Gardener's Supply Company. (888) 833-1412. www.gardeners.com.



LED Habitat Grow Kit

This stylish, compact indoor grow light system is perfect for raising herbs and salad greens in the kitchen or for nurturing sun-loving plants indoors through the winter. Available in maple, cherry, and walnut finishes for \$279 from LED Habitats. www.ledhabitats.com.



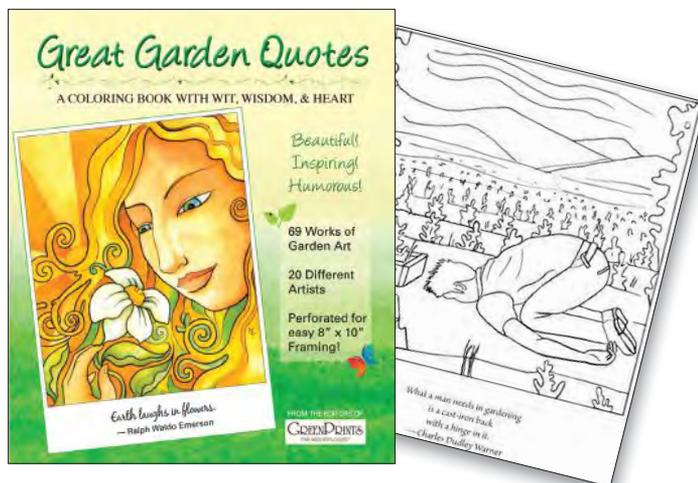
Coneflower Bird Feeder

Add a dash of whimsy to the garden while providing sustenance to avian visitors with this eye-catching, coneflower-inspired bird feeder. \$89.95 from Plow & Hearth. (800) 494-7544. www.plowhearth.com.



Storybook Toad House

Provide an enchanting abode for your resident toad with this durable, handcrafted concrete cottage—or just use it as a charming focal point in the garden. \$79.99 from Wind & Weather. (877) 255-3700. www.windandweather.com.



Great Garden Quotes Coloring Book

Inspiring garden-themed quotes accompany a variety of line drawings ready to be colored. A soothing pastime for gardeners of all ages. Perforated pages are easy to remove for keepsakes. \$14.95 from GreenPrints. (800) 569-0602. www.greenprints.com.



Garden Hod Junior

This sturdy wire-and-wood basket holds up to eight quarts and lends itself to myriad uses, both indoors and out. Available for \$39.99 from A.M. Leonard's Gardener's Edge. (888) 556-5676. www.gardenersedge.com.



Extendable Handle Rake

The easily adjustable handle and narrow rake head make it a snap to reach under large shrubs or between delicate plants. Its lightweight steel handle extends from 18 inches up to 32 inches. \$12.73 from Corona Tools. (800) 847-7863. www.coronatoolsusa.com.

Products profiled are chosen based on qualities such as innovative design, horticultural utility, and environmental responsibility; they have not necessarily been tested by the American Horticultural Society. Listed prices are subject to change.



REGIONAL HAPPENINGS

Horticultural Events from Around the Country

NORTHEAST

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

RAP NOV. 18–DEC. 31. **Gardens Aglow.** Holiday display. Coastal Maine Botanical Gardens. Boothbay, ME. (207) 633-8000. www.mainegardens.org.

RAP NOV. 25–DEC. 11. **Festival of Trees.** Display. Massachusetts Horticultural Society–The Gardens at Elm Bank. Wellesley, MA. (617) 933-4900. www.masshort.org.

NOV. 30–DEC. 2. **New England Grows.** Expo and trade show. Boston Convention Center. Boston, MA. (508) 653-3009. www.newenglandgrows.com.

RAP DEC. 4. **Kokedama: Hanging Garden Workshop.** Brooklyn Botanic Garden. New York, NY. (718) 623-7200. www.bbg.org.

RAP DEC. 8. **Urban Forests: Natural History of Cityscape Trees.** Lecture. The Arnold Arboretum of Harvard University. Boston, MA. (617) 384-5209. www.arboretum.harvard.edu.

Looking ahead

RAP JAN. 8, 2017. **Pruning in Winter.** Class. The Arnold Arboretum of Harvard University. Boston, MA. (617) 384-5209. www.arboretum.harvard.edu.

MID-ATLANTIC

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

RAP NOV. 11–23. **Million Bulb Walk.** Light display. Norfolk Botanical Garden. Norfolk, VA. (757) 441-5830. www.norfolkbotanicalgarden.org.

DEC. 4. **Master Gardener Clinic.** Rawlings Conservatory. Baltimore, MD. (410) 396-0008. www.rawlingsconservatory.org.

RAP DEC. 10. **Natural Holiday Ornaments Workshop.** Green Spring Gardens. Alexandria, VA. (703) 642-5173. www.greenspring.org.

DEC. 11. **Birds of Longwood Walk.** Longwood Gardens. Kennett Square, PA. (610) 388-1000. www.longwoodgardens.org.

Looking ahead

RAP JAN. 11–25. **Seasonal Color in Herbaceous Perennials.** Class series. University of Delaware Botanic Gardens. Newark, DE.

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

(302) 831-0153. www.ag.udel.edu/udbg.

SOUTHEAST

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

RAP NOV. 12–JAN. 7. **Garden Lights.** Holiday display. Atlanta Botanical Garden. Atlanta, GA. (404) 888-4771. www.atlantabg.org.

DEC. 1. **The Art and Technique of Pruning Japanese Maples.** Class. UNC Charlotte Botanical Gardens. Charlotte, NC. (704) 687-8622. www.gardens.uncc.edu.

DEC. 3 & 4. **Orchid, Garden, & Gourmet Food Festival.** Bonnet House Museum & Gardens. Fort Lauderdale, FL. (954) 563-5393. www.bonnethouse.org.

DEC. 10. **The Buzz About Pollinators.** Class. Smith-Gilbert Gardens. (770) 919-0248. Kenesaw, GA. www.smithgilbertgardens.com.

RAP DEC. 10. **Worm Composting.** Class. Sunken Gardens. St. Petersburg, FL. (727) 551-3102. www.sunkengardens.org.

NORTH CENTRAL

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

NOV. 25–DEC. 31. **Holiday Poinsettia Show.** Lauritzen Gardens. Omaha, NE. (402) 346-4002. www.lauritzengardens.org.

RAP NOV. 26–JAN. 8. **Avant Garden: Weaving Fashion and Nature Together.** Exhibit. Matthaei Botanical Gardens. Ann Arbor, MI. (734) 647-7600. www.lsa.umich.edu/mbg.

RAP NOV. 29. **The Best Winter Interest Plants.** Seminar. Rotary Botanical Garden. Janesville, WI. (608) 752-3885. www.rotarybotanicalgardens.org.

RAP DEC. 4. **Pteridomania: The Victorian Fern Craze.** Lecture. Lenhardt Library, Chicago Botanic Garden. Glencoe, IL. (847)

835-5440. www.chicagobotanic.org.

RAP DEC. 7. **Getting the Most Out of Stones.** Landscaping workshop. Reiman Gardens. Ames, IA. (515) 294-2710. www.reimangardens.com.

RAP DEC. 13. **Botanical Design Series: Botanical Ornaments.** Class. Greater Des Moines Botanical Garden. Des Moines, IA. (515) 323-6290. www.dmbotanicalgarden.com.

SOUTH CENTRAL

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

NOV. 6–JAN. 2. **The 12 Days of Christmas.** Garden light show. Dallas Arboretum. Dallas, TX. (214) 515-6615. www.dallasarboretum.org.

RAP NOV. 19–JAN. 1. **Gardenland Express: Holiday Flower and Train Show.** Missouri Botanical Garden. St. Louis, MO. (314) 577-5100. www.missouri-botanicalgarden.org.

RAP NOV. 20. **Ikebana: Japanese Flower Arranging.** Workshop. Powell Gardens. Kingsville, MO. (816) 697-2600 ext. 209. www.powellgardens.org.

RAP NOV. 21. **Piney Woods Heritage Festival.** Crosby Arboretum. Picayune, MS. (601) 799-2311. www.crosbyarboretum.msstate.edu.

RAP DEC. 13. **Japanese Garden Walking Tour.** Fort Worth Botanic Garden. Fort Worth, TX. (817) 392-5510. www.fwb.org.

DEC. 17. **Bird Feeders.** Family activity. Oklahoma State University. Stillwater, OK. (405) 744-4531. www.botanicgarden.okstate.edu.

SOUTHWEST

AZ, CO, NM, UT

RAP NOV. 25–JAN. 1. **Blossoms of Light.** Denver Botanic Gardens. Denver, CO. (720) 865-3500. www.botanicgardens.org.

RAP DEC. 6 & 13. **Botanical Beauty Gifts.** Red Butte Garden. Salt Lake City, UT. (801) 585-0556. www.redbuttegarden.org.

DEC. 16. **Kadomatsu in the Japanese Garden.** Workshop. ABQ BioPark Botanic Gar-

den. Albuquerque, NM. (505) 848-7112.
www.cabq.gov.

Looking ahead

RAP JAN. 10–MAR. 14. **Desert Design Certificate Courses.** Desert Botanical Garden. Phoenix, AZ. (480) 481-8188.
www.learn.dbg.org.

WEST COAST

CA, HI, NV

RAP NOV. 25–JAN. 8. **Enchanted: Forest of Light.** Descanso Gardens. La Cañada Flintridge, CA. (818) 949-4200.
www.descansogardens.org.

DEC. 3. **Holiday Ornaments from Natural and Recycled Materials.** Class. Ho'omaluhia Botanical Garden. Kaneohe, HI. (808) 233-7323. www.honolulu.gov.

RAP DEC. 6. **Succulent Wreath Class.** San Diego Botanical Garden. San Diego, CA. (760) 436-3036. www.sdbgarden.org.

RAP DEC. 7, 14, & 21. **Youth Garden Series: Sense-able Herbs.** Class. Springs Preserve. Las Vegas, NV. (702) 822-7700.
www.springspreserve.org.

RAP DEC. 10. **Organic Fruit and Vegetable Gardening.** Class. Los Angeles County Arboretum. Arcadia, CA. (626) 821-4623.
www.arboretum.org.

DEC. 17. **Medicinal Plant Tour.** Foster Botanical Garden. Honolulu, HI. (808) 522-7066. www.honolulu.gov.

RAP DEC. 17. **Water Harvesting.** Workshop. Los Angeles County Arboretum. Arcadia, CA. (626) 821-3222. www.arboretum.org.

NORTHWEST

AK, ID, MT, OR, WA, WY

RAP NOV. 27. **Ancient Tree Species.** Walk. Washington Park Arboretum. Seattle, WA. (206) 685-8033.
www.uwbotanicgardens.org.

RAP DEC. 2 & 3. **Holiday Bazaar & Artists Market.** Leach Botanical Garden. Portland, OR. (503) 823-9503. www.leachgarden.org.

DEC. 6–8. **Western Native Plant Conference.** Western Forestry and Conservation Association. Vancouver, WA. (503) 226-4562.
www.westernforestry.org.

CANADA

NOV. 25–27. **Dried Flower Arrangers' Show and Sale.** VanDusen Botanical Garden. Vancouver, British Columbia. (604) 257-8335. www.vandusengarden.org.

LEGO® Garden Sculpture Exhibit

MANY PEOPLE have fond childhood memories of building with LEGO pieces. Tapping into that wide appeal, the “Nature Connects” exhibit of plant and animal sculptures constructed from hundreds of thousands of LEGO bricks has



Sean Kenney's LEGO sculptures, like this one of a monarch butterfly, can be seen at a number of botanical gardens across the country this year and in 2017.

Conceived by contemporary sculptor Sean Kenney to both educate and entertain viewers, these intricate sculptures of flowers, insects, birds, and other creatures are intended to reflect the interconnectedness of nature. In addition to the sculptures, host gardens often offer additional activities such as LEGO building stations for kids of all ages. To see a full schedule for the exhibit, go to www.seankenney.com/portfolio/nature_connects.

Frida Kahlo Exhibit in Arizona

RENOWNED MEXICAN ARTIST Frida Kahlo's distinctive paintings often feature flora and fauna native to Mexico. As a tribute to her love of both art and gardening,



This garden display at the Tucson Botanical Gardens is inspired by Frida Kahlo's home garden, La Casa Azul.

The New York Botanical Garden created the interactive exhibit, “Frida Kahlo: Art, Garden, Life” in 2015, which includes over a dozen original paintings and works on paper. The wildly popular exhibit is now on display at the Tucson Botanical Gardens in Arizona through May 30, 2017. Attendees will also be able to view a decade's worth of Frida Kahlo portraits made from 1931 to 1941 by photographer Nickolas

Murray, as well as participate in related lectures and other activities. Go to www.tucsonbotanical.org or call (520) 326-9686 for more details.

—Lynn Brinkley, Editorial Intern

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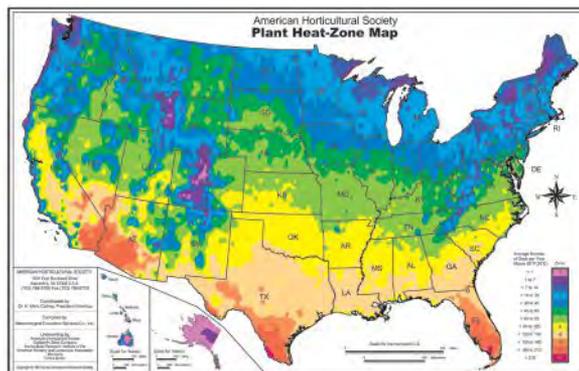
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PRONUNCIATIONS AND PLANTING ZONES

Most of the cultivated plants described in this issue are listed here with their pronunciations, USDA Plant Hardiness Zones, and AHS Plant Heat Zones. These zones



suggest a range of locations where temperatures are appropriate—both in winter and summer—for growing each plant. USDA Zones listed are still aligned with the 1990 version of the USDA's map.

While the zones are a good place to start in determining plant adaptability in your region, factors such as exposure, moisture, snow cover, and humidity also play an important role in plant survival. The zones tend to be conservative; plants may grow outside the ranges indicated. A USDA zone rating of 0–0 means that the plant is a true annual and completes its life cycle in a year or less.

Bambusa multiplex bam-BOO-suh
MUL-tee-pleks (USDA Hardiness Zones
9–11, AHS Heat Zones 12–1)

B. textilis B. TEX-til-iss (9–11, 12–8)

Chelone lyonii chee-LO-nee ly-O-nee-eye
(3–9, 9–3)

Chenopodium album chen-o-PO-dee-um AL-bum
(0–0, 10–1)

Chusquea coronalis CHUS-kwee-uh
kor-o-NAL-is (9–11, 11–1)

Corylus avellana COR-ih-lus ah-vel-LAN-uh
(4–8, 3–9)

Cryptomeria japonica krip-toh-MAIR-ee-uh
jah-PON-ih-kuh (6–9, 9–4)

Cunila origanoides ku-NIL-uh
o-rig-uh-NOY-deez (6–8, 8–6)

Cymbopogon citratus sim-bo-PO-gon
sih-TRAY-tuss (9–11, 12–1)

C. flexuosus C. flex-yoo-O-sus (9–11, 12–1)

Daphne bholua DAF-nee bo-LOO-uh (7–9, 9–7)

D. xburkwoodii D. burk-WOOD-ee-eye
(4–8, 8–4)

D. cneorum D. nee-OR-um (5–8, 8–5)

D. genkwa D. GENK-wuh (5–7, 7–5)

D. jezoensis D. jez-o-EN-sis (6–8, 8–6)

D. xmedfordensis D. med-ford-EN-sis
(6–9, 9–6)

D. mezereum D. meh-ZEE-ree-um (4–7, 7–4)

D. odora D. o-DOR-uh (7–9, 9–6)

D. tangutica D. tan-GYEW-tih-kuh (6–9, 9–6)

D. xtransatlantica D. trans-at-LAN-tih-kuh
(5/6–9, 9–5)

Dirca palustris DEER-kuh pah-LUS-triss
(4–9, 9–1)

Edgeworthia chrysantha edj-WORTH-ee-uh
krih-SAN-thuh (7–9, 9–6)

Fargesia nitida far-JEE-see-uh NIT-ih-duh
(5–9, 9–5)

F. rufa F. ROOF-uh (5–9, 9–1)

F. scabrida F. SKAY-brih-duh (6–9, 9–6)

Ilex vomitoria EYE-leks vom-ih-TOR-ee-uh
(7–10, 10–6)

Laurus nobilis LAW-rus NO-bil-is (8–11, 12–1)

Nyssa sylvatica NIS-suh sil-VAT-ih-kuh
(5–9, 9–2)

Otatea acuminata ssp. aztecorum o-TAY-tee-uh
ak-yew-min-AY-tuh ssp. az-teh-KOR-um
(9–11, 12–1)

Phytolacca americana fy-toh-LAK-uh
uh-mair-ih-KAN-uh (5–9, 9–5)

Polygonum orientale pah-LIG-o-num
or-ee-en-TAH-lee (8–9, 9–8)

Portulaca oleracea por-chew-LAK-uh
o-luh-RAY-see-uh (0–0, 12–1)

Primula japonica PRIM-yew-luh jah-PON-ih-kuh
(4–8, 8–1)

Pycnanthemum tenuifolium pik-NAN-thuh-mum
ten-yoo-ih-FO-lee-um (4–8, 8–1)

Stellaria media steh-LAR-ee-uh MEE-dee-uh
(3–8, 10–1)

Stylophorum diphyllum sty-lo-FOR-um
dy-FIL-lum (5–8, 8–1)

Syringa yunnanensis sih-REENG-guh
yoo-nuh-NEN-sis (6–7, 7–6)

Taraxacum officinale tah-RAKS-ah-kum
oh-fiss-ih-NAL-ee (3–10, 12–1)

Taxodium ascendens taks-O-dee-um
uh-SEN-denz (5–11, 12–5)

T. distichum T. DIS-tih-kum (5–11, 12–5)

Urtica dioica UR-tih-kuh dy-o-EE-kuh
(3–9, 9–1)

Viburnum trilobum vy-BER-num try-LO-bum
(2–7, 7–1)

GARDEN MARKET

CLASSIFIED AD RATES: All classified advertising must be prepaid. \$2.75 per word; minimum \$66 per insertion. Copy and prepayment must be received by the 20th of the month three months prior to publication date. Display ad space is also available. To place an ad, call (703) 768-5700 ext. 120 or e-mail advertising@ahs.org.

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1. Publication Title: *The American Gardener*. 2. Publication No. 1087-9978. 3. Filing Date: September 26, 2016. 4. Issue Frequency: Bi-monthly. 5. No. of Issues Published Annually: 6. 6. Annual Subscription Price: \$35. 7. Complete Mailing Address of Known Office of Publication: *The American Gardener*, American Horticultural Society, 7931 East Boulevard Drive, Alexandria, Virginia 22308-1300. 8. Complete Mailing Address of Headquarters or General Business Office of Publisher: Same as above. 9. Full Names and Corporate Mailing Addresses of Publisher, Editor, and Managing Editor: Publisher—American Horticultural Society, same address as above. Editor—David J. Ellis, same address as above. Managing Editor—Mary Yee, same address as above. 10. Owner: American Horticultural Society, same address as above. 11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities: None. 12. The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during the preceding 12 months. 13. Publication Name: *The American Gardener*. 14. Issue Date for Circulation Data Below: Nov./Dec. 2015–Sept./Oct. 2016. 15. Extent and Nature of Circulation:

	Avg. No. Copies Each Issue During Preceding 12 Months	Actual No. Copies of Issue Published Nearest to Filing Date
a. Total No. Copies (Net Press Run)	19,916	20,250
b. Paid Circulation		
(1) Mailed Outside-County Paid Subscriptions Stated on PS Form 3541	17,684	17,662
(2) Mailed In-County Paid Subscriptions Stated on PS Form 3541	0	0
(3) Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®	0	0
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c. Total Paid Circulation (sum of 15b (1), (2), (3),(4))	17,684	17,662
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(3) Free or Nominal Rate Copies Mailed at Other Classes Through the USPS	55	48
(4) Free or Nominal Rate Distribution Outside the Mail (Carrier or Other Means)	71	200
e. Total Free or Nominal Rate Distribution (Sum of 15d (1), (2), (3), (4))	126	248
f. Total Distribution (Sum of 15c and 15e)	17,810	17,910
g. Copies Not Distributed	2,106	2,340
h. Total (Sum of 15f and 15h)	19,916	20,250
i. Percent Paid	99.29%	98.62%

16. If total circulation includes electronic copies, report that on lines below.

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d. Percent Paid (Both Print and Electronic Copies)	99%	98%

I certify that all information furnished above is true and complete.

—David J. Ellis, Editor



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Index compiled by AHS Volunteer Caryl Wheeler.

Yaupon (*Ilex vomitoria*)

by Russell Studebaker



Yaupon's evergreen leaves and bright red fruits are valuable for adding winter interest in gardens.

THE CURIOUS common name for yaupon (*Ilex vomitoria*, USDA Hardiness Zones 7–10, AHS Heat Zones 10–6) is derived from the Catawba Native American word *yop*, which means “tree.” Its equally intriguing specific epithet, *vomitoria*, refers to its historic use as a purgative. In an account of his travels, published in 1542, Spanish explorer Álvar Núñez Cabeza de Vaca described observing Native Americans in what is now the southern United States drinking an infusion of the tree’s roasted leaves in ritual ceremonies to cleanse the body and soul of “impurities.” Today we mainly know yaupon as an ornamental tree that has a multitude of garden uses.

Native from eastern Virginia to central Florida and west to Texas, southeastern Arkansas, and Oklahoma, yaupon grows 15 to 20 feet tall, developing a vase shape as it matures. Its multiple, crooked trunks

feature smooth, whitish to gray bark. The ovate evergreen leaves, which range from about a half-inch to an inch long, are spineless with finely serrated margins. Yaupon is dioecious—that is, male and female flowers are borne on separate plants. In spring, the small white flowers attract bees and other pollinators, but only the female plants produce the typically red, quarter-inch berries that provide winter interest as well as food for songbirds and small mammals. For abundant fruit set, you must plant a male tree near every one to five female trees.

Yaupon is very adaptable, thriving in sunny to shady sites and in a wide range of soil types and environments ranging from swamps to drier upland and coastal sites. It is also deer resistant and generally untroubled by serious pest and disease problems. Because plants produce suckers, however, they can potentially spread out of bounds in a garden. To keep them in their place,

Sources

Forestfarm at Pacifica, Williams, OR. www.forestfarm.com. ('Nana')

Monrovia Nursery, www.monrovia.com. (Wholesale, but offers locator for retail sources in your region.)

Woodlanders, Aiken, SC. www.woodlanders.net. ('Will Fleming')

dig up suckers as soon as you see them.

In the landscape, yaupon is an ideal subject for barriers, espaliers, hedges, screening, topiary work, and as specimens. It is a good native substitute for higher-maintenance boxwood, although its tolerance for being sheared and pruned into geometric shapes has encouraged this practice at the expense of its natural habit. They can also be grown in large containers.

A number of cultivars have been developed, although some are difficult to locate. Ask your local nursery if it can obtain plants for you.

Woody plant expert Michael Dirr rates Hoskin Shadow™ ('Shadow's Female') one of the best red-fruited selections, and it may also be a bit hardier than other yaupons.

If you're looking for a narrow habit, try 'Pendula', a weeping selection growing 15 to 20 feet tall. 'Folsom's Weeping' is a female weeping form that reaches to 20 feet tall. 'Will Fleming' is a male columnar selection topping out at 15 feet.

For small gardens, 'Nana' is a three- to five-foot-tall female selection, but its fruit is usually obscured by foliage. 'Schillings' ('Stokes Dwarf') is a compact male that grows three feet tall and four feet wide.

Given all those choices, if you're in search of a small native tree that is evergreen, wildlife friendly, easy to grow, and adaptable, yaupon could be just what you're looking for.

Russell Studebaker is a horticulturist and garden writer living in Tulsa, Oklahoma.

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