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The Magazine of the American Horticultural Society

November / December 2013

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NOTES FROM RIVER FARM

ONE OF THE core philosophies underpinning our work at the American Horticultural Society is an unwavering belief in the positive benefits of gardening. This holiday season, we encourage you to share your passion—and all of the good things that go along with it—by giving the gift of gardening to a friend, family member, or your entire community. You will enrich someone's life and make a genuine difference in ways that those of us who have already been bitten by the gardening bug know well.

The benefits of gardening are many and well documented—exercise, relaxation, and stress relief, to name but a few. We frequently hear comments from volunteers at our River Farm headquarters about the importance of getting their own “gardening fix.” Gardening offers an antidote to the information overload inherent in our plugged-in lives. This is a particularly true for younger generations, who are growing up surrounded by technology rather than nature.

There are many ways to give the gift of gardening. For starters, you could make a point to share your garden successes—including plants, seeds, or fresh produce—with a neighbor. Or take your children or grandchildren on a fun-filled outing to a local public garden. Offer to present a gardening topic at a neighborhood meeting or volunteer to help at a school or community garden. Organize a group to get your town involved with the America in Bloom program. The smallest of gestures can make an enormous positive difference in the lives of others.

Because the AHS is all about getting more people involved with gardening, we'd be remiss if we didn't suggest making a gift of an American Horticultural Society membership. As you already know, our members enjoy benefits like free admission at nearly 300 public gardens, an annual seed exchange, and a year of *The American Gardener*. Or you can simply pass this magazine on to someone who might appreciate it. As with every issue, it features informative, entertaining, and inspiring articles about plants, gardens, and gardeners in North America.

In the following pages you'll enjoy a profile of Pierre Bennerup, an innovative nurseryowner who played an integral role in the current popularity of herbaceous perennial plants. You'll also learn the fascinating history of the Osage-orange tree, find recommendations for the best selections of American arbovitae, and pick up some design pointers for creating winter interest in your garden. And if you're looking for some more tangible garden-related gifts this season, see the holiday gift guide for gardeners on pages 54 and 55.

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

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



These young gardeners participating in the America in Bloom program take pride in their efforts to beautify their community in Belpre, Ohio (see page 11).

The American GARDENER

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MEMBERS' FORUM



Springtime at the Koi Pond in the Garden of the Pine Wind at Garvan Woodland Gardens

CHERISHED GARDEN MEMORIES

I had to shed a tear when I read about Garvan Woodland Gardens in the “Traveler’s Guide to Gardens” in the September/October 2013 issue. This past May, I spent a week in Hot Springs, Arkansas, including a visit to Garvan on Mother’s Day, because it was a highlight of the last spring vacation my mother and I shared together; she died in December 2012.

In 2008, we spent a month traveling from California to North Carolina, visiting family and all the AHS Reciprocal Admissions Program gardens we passed along the way, including Desert Botanical Garden in Phoenix, Dallas Arboretum and Botanical Garden, and Garvan Woodland Gardens. My mother’s favorite season was spring, and we visited many beautiful gardens over the years; Garvan was the last garden we walked in together. So, this past Mother’s Day, as I sat in Garvan’s stunning Anthony Chapel listening to the handbell choir and stories about mothers, I felt that she was once again by my side, walking the beautiful woodland paths with me.

*Cindy Werner
Whittier, California*

STEWARTIA FAN

Stewartias are one of my favorites trees, so I especially enjoyed Carole Ottesen’s article “All-Season Stewartias” (September/October 2013). The two Japanese stewartias in my garden took a few years to become fully adjusted to the climate and soil where I live in southern Maine (USDA Hardiness Zone 5a), but this year, the flowers were profuse and beautiful. Thanks to Paul Cotton, a nurseryman in Kennebunk, who introduced me to this wonderful addition to my garden.

*Bevan Davies
Kennebunk, Maine*



Japanese stewartia in bloom

A ROSE BY ANY OTHER NAME...

As a consulting rosarian with the American Rose Society, I always have a keen interest whenever I see anything relating to roses. On page 25 in the *Alluring Allées* article (September/October 2013), you published an image of a climbing rose growing in an allée. In the caption, the rose was listed as ‘New Dawn’ [photo shown below]. However, I’m pretty familiar with ‘New Dawn’, and its flowers are a much paler pink and have a different shape than those on the rose shown. Could the rose have been misidentified?

Sheree Wright

*Senior Grounds Keeper, Furman University
Greenville, South Carolina*



Editor’s note: Sheree does indeed have a keen eye for roses. We checked with the Planting Fields Arboretum in New York, where the image was taken, and we were informed the rose is actually ‘Dorothy Perkins’, a vintage variety that was introduced in 1901 by Jackson & Perkins. 🌹

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



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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 2013

PROGRAMS • EVENTS • ANNOUNCEMENTS

20TH ANNUAL GALA A SHINING SUCCESS DESPITE DOWNPOURS

RAINY WEATHER didn't dampen guests' spirits on September 21 as they enjoyed the American Horticultural Society's 20th annual Gala, held at the Society's River Farm headquarters in Alexandria, Virginia. More than 180 people attended the black tie affair, which featured an elegant formal dinner and a live jazz performance. Local community members and businesses donated a variety of items, such as theater tick-



Rain doesn't deter gala guests arriving at River Farm for its annual fall fundraiser, above left. Above right: Guests view a variety of silent auction items available for bidding.

ets, jewelry, and gift baskets, for the evening's silent auction. Always popular for bidding are River Farm-themed items, which this year included hand-turned wooden bowls made from the property's fallen trees and rooted cuttings from its historic Osage-orange tree. Local garden clubs donated and arranged flowers for each table's centerpiece, which guests were able to purchase at the Gala's conclusion.

"This annual event is one of the AHS's most important fundraisers," says Development Associate **Joanne Sawczuk**. "We are so grateful for the generous donations and other support we received to make this one such a success." Proceeds from the gala help to support the stewardship of River Farm and the AHS's educational programs.

PLANT SOCIETY MEETING SET FOR SPRING

THE AHS is excited to be hosting the third annual meeting of the Coalition of American Plant Societies on May 15 and 16, 2014. Representatives from national and regional plant-focused organizations are encouraged to attend the event, which will be based at the Society's River Farm headquarters in Alexandria, Virginia. Planning for the meeting is still underway, and additional details will be announced in the coming months on the AHS website (www.ahs.org) and in this magazine.

GATOR SPOTTED AT RIVER FARM

THE 25 ACRES OF uneven terrain that comprise the AHS's River Farm headquarters requires its gardeners to cover a lot of ground during daily maintenance of the historic property. Doing so just got easier thanks to the arrival of a new John Deere

COURTESY OF HERRERA-CAMPBELL PHOTOGRAPHY (2)

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, 2013, and October 31, 2013.

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River Farm Horticulturist Sylvia Schmeichel tries out the new Gator.

“Gator” utility vehicle. Donations from two AHS Board members, **Katy Moss Warner** and **Skipp Calvert**, helped make this purchase possible.

“A Gator has been on our wish list for a long time, so this is a dream come true for our staff and volunteers,” says River Farm Horticulturist and Manager **Sylvia Schmeichel**. “Now we are able to accomplish tasks much more efficiently and get supplies to hard-to-reach places.” Prior to getting the utility vehicle, work crews had to use wheelbarrows or hand carts to haul tree trimmings, mulch, and plants long distances.

News written by Editorial Intern Audrey Harman.

AUDREY HARMAN

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AHS NEWS SPECIAL: America In Bloom Community Involvement Award

by Audrey Harman

THE CLOSE-KNIT town of Belpre, Ohio, took home the Outstanding Achievement in Community Service Award for this year's America in Bloom (AIB) competition. This award, sponsored by the American Horticultural Society, "is a thrill for us to win," says **Leslie Pittenger**, a Belpre city auditor who helped coordinate the town's beautification efforts.

AIB promotes "nationwide beautification through education and community involvement by encouraging the use of flowers, plants, trees, and other environmental and lifestyle enhancements." One of the main ways the organization does this is by orchestrating an annual competition that evaluates contestants for overall impression, environmental awareness, heritage, urban forestry, landscape, and floral displays. Communities compete in eight population categories and also vie for special awards that recognize outstanding achievements in different categories.

BLOOMING BELPRE

A variety of projects and activities added up to help Belpre, a town of about 7,000 located in southeastern Ohio, stand out from the competition when it comes to community involvement. "All sectors are involved," says **Evelyn Alemanni**, one of the AIB judges who evaluated the town, "the Rotary, Women's Club, Garden Club, a local garden center, Girl Scouts and Boy Scouts, and the community garden."



Above: A group of Belpre volunteers gathers proudly at the city's welcome sign. Left: A Belpre church group helps plant trees.



These various groups undertook beautification projects such as up-cycling used tires into painted planters and constructing a raised-bed island at a busy intersection. The Belpre in Bloom committee encouraged businesses to take pride in their storefronts and landscaping by recognizing ex-

emplary ones on the city website and on the Belpre in Bloom Facebook page.

While the entire town got involved in some way, "the dedication and hard work of our youth has been amazing," says Pittenger. The judges were also impressed with how the town got youngsters involved. For example, Girl Scouts and Boy Scouts painted more than 300 fire hydrants sky blue with white daisies throughout the town.

Belpre selects a "Miss Belpre in Bloom" from among the town's elementary school students. The winner reigns over all Belpre in Bloom activities. "It's the only place we've seen do this, and I thought it was a wonderful idea," says Alemanni.

FUTURE PLANS

After participating in the AIB contest for the last two years, Belpre isn't resting on its laurels. "We are already reviewing the notes from the judges on what to improve upon in 2014," says Pittenger.

A plaque displayed at the town's historical society reads: "The greatest wealth of a community lies not in the amount of its treasury, but in the quality of its leadership and the dedication of its people." The community within Belpre has proven beyond a doubt that it is rich indeed.

Audrey Harman is an editorial intern with The American Gardener.

2013 AMERICA IN BLOOM AWARD WINNERS

Population Category Awards

- Under 4,000 **Echo, Oregon**
- 4,001–7,000 **Estes Park, Colorado**
- 7,001–12,000 **Demopolis, Alabama**
- 12,001–18,000 **Holliston, Massachusetts**
- 18,001–25,000 **Calabasas, California**
- 25,001–30,000 **Winter Park, Florida**
- 30,001–50,000 **Holland, Michigan**
- Over 50,000 **Greater Racine, Wisconsin**

Outstanding Achievement Awards

- Heritage Preservation **Holland, Michigan**
- Floral Displays **Gallipolis, Ohio**
- Landscaped Areas **Estes Park, Colorado**
- Environmental Efforts **University of Findlay, Findlay, Ohio**
- Community Involvement **Belpre, Ohio**
- Urban Forestry **Washington, Missouri**

For a complete list of 2013 award-winners and more information about the annual competition, visit www.americainbloom.org.

AHS MEMBERS MAKING A DIFFERENCE: Juliana Cerra

by Audrey Harman

WHEN JULIANA CERRA first moved into her home in Northville, Michigan, in 1998, it had “no valuable horticultural features,” she says. The bland landscape of her one-acre lot drove her to sign up for a Master Gardener training program. “I became obsessed with garden design and landscaping,” says Cerra.



Juliana Cerra

A few years later, she joined a local garden club with a “vested interest in the community,” Cerra says. Through this club, she continued to hone her design and gardening skills while contributing to various improvement projects at some of Northville’s public gardens. At the same time, she also joined the American Horticultural Society (AHS).

RESTORING NATIVE ECOSYSTEMS

Over the decade of her AHS membership, Cerra has found “inspiration in being a part of an organization that honors the past but looks to the future,” especially in her current position as landscape manager of the Frank Lloyd Wright Palmer House in Ann Arbor, Michigan, where she has worked since 2009. Her job involves renovation of the landscape established by William and Mary Palmer—the original owners of the house designed by the legendary architect in the 1950s—restoration of native ecosystems, and implementation of sustainability guidelines on the one-and-a-half acre suburban site.

To gain more formal training related to historic places and their landscapes, Cerra began working towards a master’s degree in environmental design in 2011. “My current program of study at Michigan State University focuses on the Palmer House project, with applications



Partnering with Friends of the Rouge and other community volunteers, members of the Northville Historical Society install coir logs along the mill race to control erosion.

for mid-century modern architecture and cultural landscapes,” she explains.

Cerra’s studies and skills are also benefiting a community project to restore a stream bank ecosystem at Mill Race Village in Northville. “The 10-acre park features restored 19th-century buildings bounded by a tributary of the Rouge River and an old mill race,” explains Cerra. The project aims to stabilize the channel’s severely eroded bank, which had become a public and environmental hazard.

“We are currently pursuing a master plan that includes bank stabilization, native-plant grow zones, wildlife habitat improvement, and educational components,” she says. Just two years into the project, Cerra and her team of fellow volunteers have installed 140 feet of coir logs, erosion control blankets, and hundreds of native plant plugs, as well as educational signage. These efforts are already paying off in many ways. “The native plantings offer more protection for wildlife,” notes Cerra, who “noticed

more turtles on the banks sunning themselves than ever” this past summer.

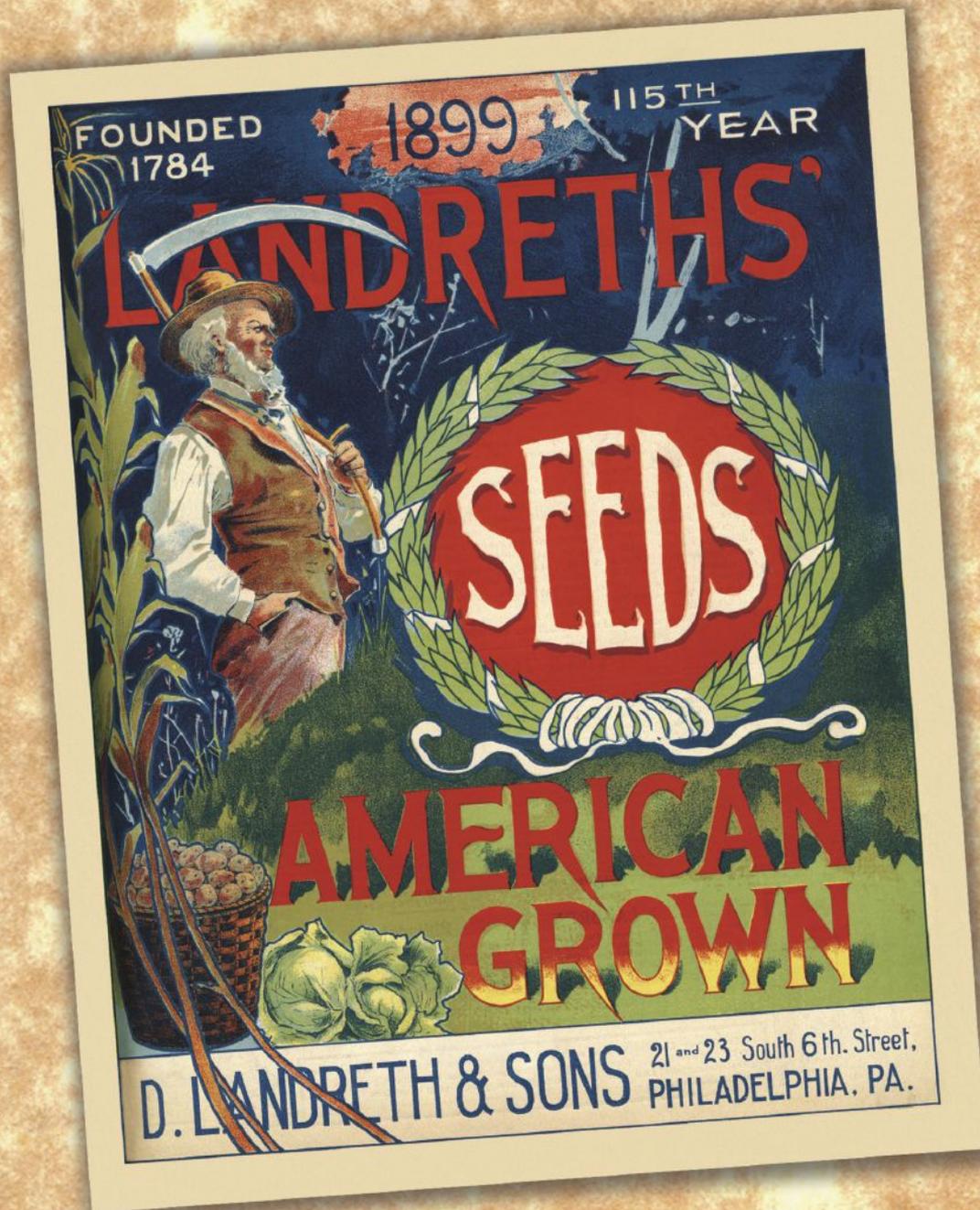
ENGAGING THE COMMUNITY

The Mill Race Village project is also a valuable tool for promoting sustainable practices. For example, Cerra is working to engage visiting schoolchildren as well as their parents and educators with lessons about native ecosystems. For the community’s residents in general—many of whom own waterfront property—she hopes the bank restoration will not only emphasize the importance of protecting water quality, but also inspire them to adopt eco-friendly landscaping approaches in their own landscapes.

“The project is a good example of how specific environmental problems can be addressed with inexpensive long-term solutions,” says Cerra, “and the result is beautiful.”

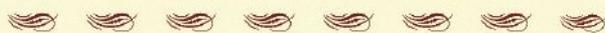
Audrey Harman is an editorial intern with The American Gardener. Former editorial intern Missy Katner contributed to this article.

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designing a Garden *with*

Create a tapestry of berries, bark, foliage, and flowers for winter effects.

BY C. COLSTON BURRELL

IF YOU'RE ONE of those people who believe winter means the end of garden pleasures, you're in for a surprise; there are many ways to create a garden that is sensual and compelling during the "unsung" season. Winter strips away a garden's green veneer, leaving an austere but hauntingly beautiful landscape ripe with promise. Divested of summer's excesses, the details of each plant's architecture are open to scrutiny. As deciduous trees and shrubs shed their leaves, their branching structure emerges against a backdrop of bark, berries, seed heads, and evergreen foliage.

Well-planned winter gardens use this simple framework to create visual complexity throughout the many phases of the season. Plants and low-angled sunlight conspire in a subtle interplay, and the overall display evolves daily as birds feast on berries and wind sets grass seeds free from their plumes.

Some people designate a specific area as a "winter garden," but I suggest thinking boldly and making your entire yard a winter canvas. By placing key elements throughout the landscape, you provide structure, interest, and flowers during the winter. Trees and shrubs create the permanent framework, or bones of the garden, which is most evident in winter. Early in the season, bark and berries are the main show, along with the colorful dried foliage and silken plumes of ornamental grasses. Plants with evergreen foliage—including trees, shrubs, and herbaceous perennials—are the workhorses of the winter landscape. At the cusp of late winter,



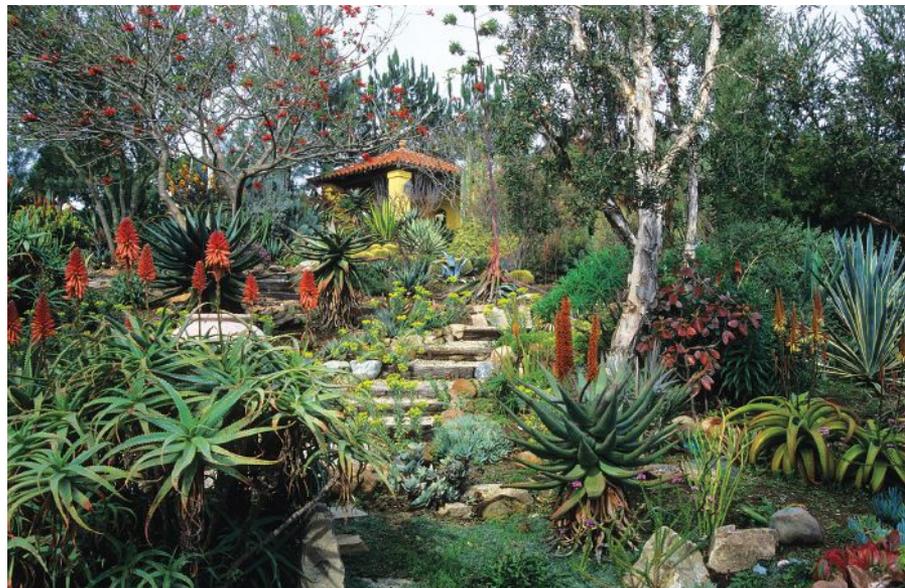
early bulbs, precocious shrubs, and other flowering plants emerge to bring welcome color and fragrance.

REGIONAL PERSPECTIVE

In subtropical America, the winter season is little more than a temporary lull in the usual riot of bloom. Winter gardening is a

privilege reserved for those who live in the temperate regions of North America. In the South, coastal northern California, and the Pacific Northwest (USDA Hardiness Zones 7–9), winter is relatively mild and short-lived. Throughout the rest of North America, however, winter occupies a significant chunk of the gardening year.

Winter Interest



Left: Designed by Conni Cross, this pleasing composition at Donna Wilder's Long Island garden features 'Heritage' river birch, hydrangeas, and spireas. **Above:** The sculptural shape of a cutleaf Japanese maple and evergreen shrubs lend winter interest to this Seattle garden. **Top:** In southern California, Patrick Anderson's succulent garden is bright with blooms in January.

The type of winters experienced in your region governs the overall strategy for designing a winter garden. I gardened for 11 years in USDA Zone 4 in Minnesota, where a deep blanket of snow spread over the garden soon after Thanksgiving, and few plants stirred until warm spring winds melted the snow.

In regions like this, where snow cover persists, ground-level plantings have little impact, so it's best to concentrate on shrubs and trees with exceptional attributes and good winter color. Choose plants with dramatic bark coloration, brilliant berries, and eccentric forms. Ornamental grasses and dried seed heads of

tall perennials such as Joe-Pye weed (*Eutrochium purpureum*, USDA Zones 3–8, AHS Zones 9–1) and cup plant (*Silphium perfoliatum*, Zones 4–9, 9–4) will also protrude elegantly from the deepest snow.

Now I live in Virginia, where my garden covers a wooded hillside that falls away from a terrace and deck at the front of the

WINTER GARDEN DESIGN TIPS

Thoughtful plant choice and placement are the keys to creating an evocative winter garden. Start by looking out of your windows. Analyze the major sight lines of your garden and plan how to integrate plants that will add eye-catching color or structure in winter.

Layer plantings for cumulative, dramatic effect. Layered plantings are more interesting as well as more wildlife friendly. Maximum drama depends on a balance between contrast and harmony. Set a flowering tree against a rich evergreen backdrop for contrast, then underplant with a blend of evergreen perennials and flowering bulbs. A bed of mixed heaths (*Erica* spp.) and



Designer Conni Cross creates a layered effect with a large shock of miscanthus rising amid evergreen Japanese cedars and backed by silver birches.

heathers (*Calluna* spp.) offers colorful evergreen foliage and early flowers.

That's not to say that a single specimen cannot make a powerful statement. The eccentrically twisted branches of a moss-covered Harry Lauder's walkingstick (*Corylus avellana* 'Contorta', Zones 4–8, 9–1) can hold the eye in any context. A lone Japanese apricot (*Prunus mume*, Zones 6–9, 8–6) in full February bloom against a haze of bare winter branches is also a stand-out soloist.

Repetition creates unity and rhythm in a planting. Picture a mountain view, with overlapping ridges as far as the eye can see. Each successive ridge gets paler, until earth and sky meld. Plants farther from the eye should be lighter in color, which accentuates the illusion of depth. Fine texture juxtaposed with bold texture creates the same effect.

Be sure to choose plants in scale with the space in which you are working. A small city lot may have room for only one tree or a cluster of shrubs. If that's the case, choose plants that offer the best combination of branching structure, bark, flowers, and fruits. In a larger garden, plantings can feature clusters of trees, drifts of shrubs, and sheets of bulbs and perennials at ground level.

To stimulate dulled winter senses, choose a few plants that offer fragrant blossoms, such as witch hazels (*Hamamelis* spp.), daphnes, or sweet box (*Sarcococca* spp.). These as well as small, delicate, winter-blooming bulbs should be planted near the house or along a regularly traveled pathway.

Light is also an important factor when creating a great winter garden. Place your plants to take full advantage of the soft quality of light and the low angle of the winter sun. An orange-flowered witch hazel will burst into flames when illuminated from the side by the warm glow of the rising or setting sun. Grass plumes seem to glisten from within with backlighting.

Constructed elements such as walls, arbors, and benches add their own interest in winter. Free of the greenery that festoons them during the growing season, they take on a new prominence and make good focal points in the winter landscape. —C.C.B.

house. Here, as in much of the South, winters are relatively mild, and there is seldom more than a month after the turning of the year when a bloom cannot be found. This allows me to use a wide variety of plants to enhance my winter landscape.

The garden is viewed in all seasons through four large windows that bring the outdoors in and frame a series of dramatic outward views to the meadows and gently rolling mountains beyond. Key sight lines or vistas radiate like spokes from each window, so I have placed sitting areas or objects such as water basins to provide a focal point in each of these views. To accentuate these vistas, I have included a dramatic plant or combination of plants that offer excep-

tional winter interest in each sight line. Successive layers of plantings carry the eye from beds just outside the windows to the middle ground, to the background, and, ultimately, to the borrowed scenery beyond the confines of the garden.

Although not everyone has four sight lines, I recommend trying this process with whatever vistas you have. Start by working with the view you enjoy most in winter, perhaps the one you see from your sun room or out of the kitchen window.

AROUND THE HOUSE

Sometimes we don't want to stir far from our warm houses in winter, so plant small, early-blooming bulbs and fragrant plants

near the house or along a regularly traveled walkway so they can't be missed. Beds immediately around my house feature small shrubs mixed with evergreen groundcovers, minor bulbs, and herbaceous perennials selected to provide maximum color and fragrance early in the season. By the first week in February, the evergreen variegated winter daphne (*Daphne odora* 'Variegata', Zones 7–9, 9–7) is festooned with tight pink flower clusters that, to my nose, smell a perfect mixture of gardenia and lemon. Entering and leaving the house is a treat, and on warm days with the door open, the whole house smells divine.

Some of winter's flowers are subtle, often making up in fragrance for what they

lack in size and color. When the tantalizing scent of sweet box (*Sarcococca hookeriana* var. *humilis*, Zones 6–9, 9–3) mingles with the chilly air in February and March, the tiny white flowers are easily overlooked. The glossy evergreen leaves make an excellent groundcover in rich, well-drained soil under berried branches of chokeberry (*Aronia* spp.) or winterberry holly (*Ilex verticillata*, Zones 3–9, 9–1), but are equally effective carpeting the ground amid fragrant white forsythia (*Abeliophyllum distichum*, Zones 5–8, 8–5), camellias, or witch hazels.

Another scented winter bloomer in my garden is standish honeysuckle (*Lonicera standishii*, Zones 5–8, 8–3), a precocious vamp doused head to toe with perfume when its cream-colored flowers open in late winter. (Note: Check with local experts before planting because this species is invasive in some regions.)

EVERGREEN MAINSTAYS

Evergreens are particularly critical elements of the winter landscape, especially in the North. They are a reliable source of winter

color and also provide a backdrop for deciduous shrubs and trees with colorful stems or interesting branching patterns. Be sure to include a blend of evergreens with different heights and shapes throughout your garden. Don't confine yourself to conifers; where they are hardy, include broadleaf evergreen shrubs and perennials, too. Larger evergreens can be used as specimen plants or placed near the middle and edges of the garden to serve as backdrops for other plantings. Smaller ones are easily incorporated into mixed borders or grown as low hedges.



Hellebores are among the perennials that begin blooming in late winter. Here stinking or bear's foot hellebores are accompanied by the flowers of 'Orange Beauty' witch hazel.



In addition to their foliage, evergreen hollies bear colorful fruits that persist through winter.

Some plants serve double duty, providing evergreen foliage and beautiful flowers. One indomitable winter bloomer that I use throughout my garden is the Lenten rose (*Helleborus ×hybridus*, Zones 4–8, 8–3). These cheerful, long-lived plants tolerate plunging temperatures with aplomb. They greet a frosty morning with their heads face down, but the flowers rise with the mercury and are fully recovered by 40 degrees. Not only do they flower in winter, their elegant, umbrellalike leaves grace the garden through the seasons. For variety, try sweet hellebore (*H. odorus*, Zones 5–9, 9–3), which sports fragrant green flowers and silky bright green leaves. The spidery black-green leaves of stinking hellebore (*H. foetidus*, Zones 5–8, 8–6) are elegant intermingled with ferns or

in mass plantings. The chartreuse flower buds begin developing in December, and plants are usually in full bloom by February.

DECIDUOUS SHRUBS AND TREES

Larger shrubs and small trees are best used to define the mid-ground of the garden. Mass plantings of grasses, berried branches, and colored twigs come into play as well. Shrubby dogwoods (*Cornus sericea* and *C. alba*, Zones 2–8, 8–1) are mainstays, and red-, orange-, and yellow-twigged varieties are available.

Willows are another good choice. Flame willow (*Salix* ‘Flame’, Zones 2–8, 8–1) has glowing red-orange stems, while basket willow (*S. purpurea* ‘Nana’, Zones 3–7, 7–1)

warm days together, the first flowers to open are those of fragrant wintersweet (*Chimonanthus praecox*, Zones 7–9, 9–6), an upright, open shrub to 10 feet tall. The rhapsodic scent of these nodding, waxy-yellow flowers, reminiscent of spicy fruit, is as pronounced as that of witch hazel is subtle. And the flowers seem unperturbed by frost, often emerging unblemished from temperatures in the teens. ‘Concolor’ has pure yellow flowers that are larger than those of the species. *Praecox* means premature, or precocious, so these are true winter bloomers.

Try also a mass of yellow-flowered winter jasmine (*Jasminum nudiflorum*, Zones 6–9, 9–6) as a groundcover, or place it

where the lithe green stems can cascade down a wall. This early bird, which seems immune to cold, has a lax habit that recalls forsythia, but is more graceful.

MORE FLOWERING PLANTS

When warm days begin to beckon, be sure there are detailed plant combinations to discover throughout the garden. Intermingle an assortment of shrubs with good winter interest and underplant with a carpet of low-growing evergreen shrubs or perennials such as Chinese sweetbox (*Sarcococca orientalis*, Zones 6–8, 8–5), wild ginger (*Asarum europaeum*, Zones 4–8, 8–1), and holly ferns (*Polystichum* spp.) mixed with early-blooming bulbs.

Resources

The Garden in Winter by Rosemary Verey. Timber Press, Portland, OR, 1995.

The Garden in Winter: Plant for Beauty and Interest in the Quiet Season by Suzy Bales. Rodale, Emmaus, PA, 2007.

The Winter Garden by Peter Loewer and Larry Mellichamp. Stackpole Books, Mechanicsburg, PA, 1997.

Wonders of the Winter Landscape by Vincent A. Simeone. Ball Publishing, Batavia, IL, 2005.

has stems the color of burnished bronze. Set against a backdrop of evergreens, these colorful stems put on a long show, and glow in the low winter sun.

I achieve rhythm in my garden by repeating a key plant or a key color. One small tree with a vase-shaped form I use repeatedly is witch hazel (*Hamamelis ×intermedia*, Zones 5–9, 9–1), which is placed layer upon layer in the foreground, mid-ground, and background. The spidery petals unfurl in the strengthening sun, spreading a delicate perfume. The cultivar ‘Diane’, with flowers the color of a winter fire, is placed close to the house because its richly colored beauty is most apparent on close inspection. In the mid-ground, orange ‘Jelena’ and yellow ‘Primavera’ hold sway, while the golden ‘Arnold Promise’ is placed at the far reaches of the garden because its bright color reads best at a distance.

Witch hazels are not always the earliest of bloomers. When you can rub two



The fragrant white flowers of paperbush (*Edgeworthia chrysantha*) contrast pleasingly with the vivid bare stems of *Cornus sanguinea* ‘Midwinter Fire’ and ‘Winter Flame’.

SELECTED PLANTS FOR WINTER INTEREST

Here's a list of plants with various features that make them suitable for including in a winter garden. The botanical names are followed by USDA Plant Hardiness and AHS Plant Heat Zones.

PLANTS WITH COLORFUL STEMS OR BARK

- Crape myrtle (*Lagerstroemia indica*, 7–9, 9–7)
- Ghost bramble (*Rubus cockburnianus*, 5–9, 9–6)
- Himalayan birch (*Betula utilis* var. *jacquemontii*, 4–9, 9–3)
- Moosewood maple (*Acer pensylvanicum*, 3–7, 7–3)
- Paperbark maple (*Acer griseum*, 3–7, 7–2)
- River birch (*Betula nigra* 'Heritage', 5–7, 7–2)

BERRY-BEARING PLANTS

- American cranberrybush (*Viburnum trilobum*, 2–7, 7–1)
- Cotoneaster (*Cotoneaster divaricatus*, 4–7, 7–4)
- Firethorn (*Pyracantha coccinea*, 6–9, 9–6)
- Mountain ash (*Sorbus alnifolia*, 3–7, 8–1)
- Pernettya (*Pernettya mucronata*, 7–10, 10–7)
- Possumhaw holly (*Ilex decidua*, 5–9, 9–5)

WINTER-FLOWERING SHRUBS AND TREES

- Buttercup winter hazel (*Corylopsis pauciflora*, 6–9, 9–5)
- February daphne (*Daphne mezereum*, 5–8, 8–5)
- Silk tassel tree (*Garrya elliptica*, 8–11, 12–8)
- Spring spiketail (*Stachyurus praecox*, 6–8, 8–6)
- Winter heath (*Erica carnea*, 5–7, 7–5)

EVERGREENS

■ Conifers

- False cypress (*Chamaecyparis lawsoniana*, 5–8, 9–5)
- Lacebark pine (*Pinus bungeana*, 4–7, 7–1)
- Plum yew (*Cephalotaxus harringtonia*, 6–9, 9–3)

■ Trees and Shrubs

- Alexandrian laurel (*Danae racemosa*, 6–9, 9–2)
- Creeping mahonia (*Mahonia repens*, 5–8, 8–3)
- Inkberry holly (*Ilex glabra*, 5–9, 9–5)
- Japanese camellia (*Camellia japonica*, 8–10, 10–3)

- Japanese fatsia (*Fatsia japonica*, 8–11, 12–8)
- Osmanthus (*Osmanthus heterophyllus*, 6–9, 9–4)
- Star anise (*Illicium floridanum*, 7–10, 9–4)

■ Herbaceous Perennials

- Bergenia (*Bergenia cordifolia*, 4–8, 8–1)
- Christmas fern (*Polystichum acrostichoides*, 3–8, 8–1)
- Hardy ginger (*Hexastylis shuttleworthii*, 5–8, 8–4)
- Japanese holly fern (*Cyrtomium falcatum*, 6–11, 12–6)
- Makinoi's holly fern (*Polystichum makinoi*, 4–8, 8–3)
- Sacred lily (*Rohdea japonica*, 6–9, 9–6)

WINTER-FLOWERING BULBS

- Crocus (*Crocus chrysanthus*, 3–8, 8–1)
- Cyclamen (*Cyclamen coum*, 5–9, 9–5)
- Grecian windflowers (*Anemone blanda*, 4–8, 8–1)
- Reticulated iris (*Iris reticulata*, 5–9, 8–4)
- Winter aconite (*Eranthis hyemalis*, 4–9, 9–1)

In my garden, a carpet of snowdrops (*Galanthus* spp.) and lavender *Crocus tommasinianus* (Zones 4–8, 8–1) is lovely under a sweep of fragrant, yellow-flowered paperbush (*Edgeworthia chrysantha*, Zones 7–9, 9–6). Other early-blooming bulbs such as daffodils, glory of the snow (*Chionodoxa luciliae*, Zones 3–9, 9–1) and striped squill (*Puschkinia scilloides*, Zones 3–9, 9–1) add valuable ground-level color to the late-winter landscape.

The most distant plantings in a garden should meld almost imperceptibly with the borrowed landscape beyond. I placed a drift of Indiangrass (*Sorghastrum nutans*) at the bottom of my garden to echo the tawny broomsedge (*Andropogon virginicus*) and little bluestem (*Schizachyrium scoparium*) growing in the meadow beyond. Pale witch hazel (*Hamamelis mollis* 'Pallida') and yellow-twig dogwood (*Cornus sericea* 'Flaviramea') stand



Winter aconite is an early-blooming bulbous plant that usually appears before crocuses.

out against the green junipers that punctuate the tawny meadow grasses.

No matter where you live or how severe your winter, you can create an evocative garden that celebrates the sublime beauty of the winter season. This winter, consider the views from your windows, and imagine a landscape as provocative as a summer border. Come spring, you can add the plants that will color and perfume the next unsung season.

A writer, photographer, lecturer, and landscape consultant, C. Colston Burrell lives in Free Union, Virginia. He and coauthor Judith Knott Tyler celebrate precocious bloomers in Hellebores: A Comprehensive Guide (Timber Press, 2006).

[This is an updated version of an article that was originally published in the November/December 2001 issue of *The American Gardener*.]

the venerable Osage-Orange

BY GUY STERNBERG

This native tree, deeply enmeshed in American history, is deserving of wider consideration as a hardy, drought-tolerant shade tree.

THE OSAGE-ORANGE (*Maclura pomifera*, USDA Hardiness Zones 4–9, AHS Heat Zones 10–5) is not well known in horticultural circles—yet. But the tree’s intriguing role in American history has fueled an enduring fascination among historians, anthropologists, arborists, and gardeners alike.

Before settlers arrived in North America, Native Americans prized Osage-orange for its wood, ideal for making bows and a source for yellow dye. The tree was introduced to Western science in the early 1800s as the first plant specimen collected by Meriwether Lewis and William Clark’s Corps of Discovery expedition.

Next came the tree’s important use as field hedgerows, which helped the heartland of America evolve from open range to a farm economy in the mid-1800s. After the invention of barbed wire in the 1870s reduced the need for hedges, it provided durable fence posts upon which to fasten that wire. In the 1930s, those Osage-orange hedgerows served as windbreaks that saved so much of our Great Plains soil from erosion during the Dust Bowl years. The fruits, long reputed to have insect-repelling properties, are now being evaluated as a source for chemical compounds for controlling insects.

A tree of many virtues, Osage-orange makes an impressive shade tree that thrives in a broad range of climates and soils.

STATELY SPECIMENS

Osage-oranges generally grow 30 to 50 feet tall with an equal or greater spread, taking on a rounded to spreading habit as they age. Trees often form multiple trunks that become wide near the base, with gray



The author gazes up at a giant Osage-orange tree near Piasa, Illinois. Standing at the edge of a field, the tree is the lone remnant of a former hedgerow.

to brown, deeply furrowed bark that has rust-colored highlights. Their alternate leaves are ovate, tapering to a sharp point. The leaves are medium to dark green in spring and summer, turning chartreuse to buttery yellow in fall before they drop. Young trees usually bear sharp spines located near the leaf axils, but these become less prevalent or disappear as trees mature.

Osage-oranges are monoecious, so individual trees bear either female (pistillate) or male (staminate) flowers in early summer. Both are greenish-colored and relatively inconspicuous; female flowers appear in globe-shaped clusters on short stems; male flowers are usually in globular clusters but occasionally form slightly elongated racemes. The flowers are wind-pollinated, and fruits form



Osage-oranges are monoecious, so individual trees have either male flowers, left, or female flowers, right. Because they are greenish and small, the flowers are easy to miss.

only on trees that bear female flowers. The grapefruit-sized fruits—technically known as syncarps—start out bright green and turn yellowish as they mature. Average fruits weigh about a pound, but selections such as ‘Cannonball’ and ‘Bowling Ball’ can bear three-pounders. Encased under the bumpy rind are hundreds of seeds embedded in a pulpy, fibrous mass. The fruits are generally regarded as inedible, but a number of foragers say the seeds can be eaten raw or roasted, much like pumpkin or sunflower seeds. Squirrels, horses, and cows also enjoy them.

The fruits are attractive on the tree and a great conversation piece, but when they

begin dropping to the ground in late September to October, they create a hazard for unwary pedestrians as well as a significant mess. For this reason, male trees are generally preferred for landscape use.

PREHISTORIC ROOTS

Based on fossil records, the Osage-orange’s existence dates back at least 100,000 years, prior to the last glaciation of eastern North America. At that time, its range extended from what is now the south-central United States north and east to at least Ontario, Canada. Like all trees, its range was forced south by the advancing ice sheet.

Unlike almost all other trees, it didn’t find its way back when the ice retreated. Scientists believe this is because the primary organisms that consumed and spread its large fruits—probably large mammals such as mastodons, gomphotheres, prehistoric horses, and ground sloths—became extinct before they could get the job done.

EXPANDING HORIZONS

By the time Europeans began arriving in North America in the 16th and 17th centuries, the natural range of the tree was primarily in the drainage basin of the Red River, which runs from southern Oklahoma and Arkansas into northern Texas and Louisiana. Native Americans familiar with Osage-orange’s many virtues likely aided in spreading the tree beyond its range.

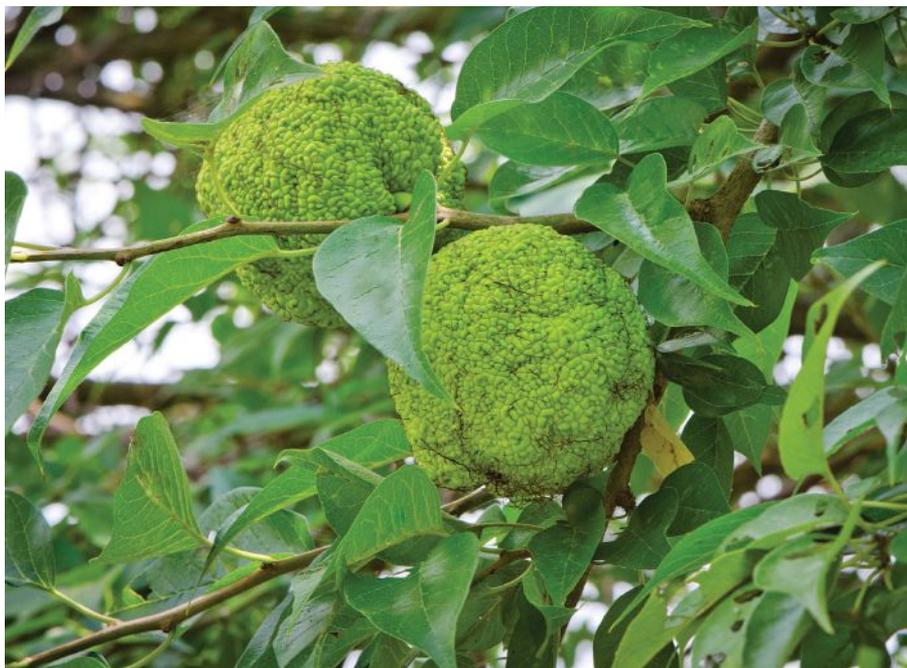
One of the earliest written reports of the tree came from soldier-turned-explorer Meriwether Lewis, who saw Osage-orange trees growing in the garden of Pierre Chouteau, an Indian agent who was living in St. Louis, Missouri. Prior to embarking on the first Corps of Discovery expedition with William Clark, Lewis sent President Thomas Jefferson “slips”, or cuttings, of what he, in a letter dated March 26, 1804, referred to as “Osage apple.” You can view a herbarium specimen of the plant, one of 134 plants collected by Lewis and Clark, online (see “Resources,” page 22).

The disposition of these cuttings is not conclusively recorded, but researchers suspect Jefferson may have shared some with seedsman Bernard McMahon of Philadelphia. Several Osage-orange trees grow in the yard of St. Peter’s Episcopal Church in Philadelphia, which is across the street from where McMahon operated a store. (For a list of places where other large and/or historic Osage-orange specimens can be viewed, see the web special linked to this article on the AHS website at www.ahs.org.)

The spread of the Osage-orange by humans and wildlife continued over the next two centuries, so that today the tree is cultivated or naturalized in about three quarters of the United States, primarily east of the Rocky Mountains.

A LITTLE FAMILY HISTORY

At one time, *Maclura pomifera* was considered to be the sole species in its genus, which is part of the mulberry family



Osage-orange fruits grow to the size of grapefruits, turning from green to yellow as they mature.

Sources

Forestfarm Nursery, Williams, OR.
(541) 846-7269.

www.forestfarm.com.

Forrest Keeling Nursery, Elsberry, MO.
(573) 898-5571. www.fknursery.com.

Musser Forests, Inc., Indiana, PA.
(800) 643-8319.

www.musserforests.com.

Rare Find Nursery, Jackson, NJ. (732)
833-0613. www.rarefindnursery.com.

Sunshine Nursery, Clinton, OK.
(580) 323-6259.

www.sunshinenursery.com.

Resources

Discovering Lewis & Clark (The Lewis and Clark Fort Mandan Foundation): To view the herbarium sheet of Osage-orange, along with details about the specimen and the nomenclature: www.lewis-clark.org/content/content-article.asp?ArticleID=2521.

Native Trees for North American Landscapes by Guy Sternberg with Jim Wilson. Timber Press, Portland, OR, 2004.

Nature's Heartland: Native Plant Communities of the Great Plains by Bill Boon. Iowa State University Press, Ames, IA, 1990.

(Moraceae). Many botanists now recognize 11 or more species in the genus, including a red-fruited relative called Chinese silkwood tree (*M. tricuspidata*), which was formerly listed in the genus *Cudrania*, and the tropical fustic (*M. tinctoria*) commonly used for dye.

Other members of the family include tropical trees such as jackfruit and breadfruit, as well as the mulberries (*Morus* spp.) more familiar to those of us in temperate regions. Indeed, the relationship between mulberries and Osage-orange can be seen quite clearly if you look closely at the flowers and fruits of both species. Figs (*Ficus* spp.) are also in the mulberry family, and if you break open Osage-orange fruits or cut into branches, you'll encounter sticky, milky-colored sap similar to that in figs.

The Osage-orange endured some nomenclatural musical chairs before its current name was accepted. It was first named by botanist Constantine Samuel

PROPAGATING OSAGE-ORANGES

Osage-oranges can be hard to find in nurseries, but, fortunately, they are easily propagated from seed, which can be extracted from partially decayed fruits in late fall. Soak the seeds in water for a day or so to help remove the sticky pulp around them, then plant them in containers and cold-condition them by placing the containers in a refrigerator or cool garage with temperatures below 40 degrees F for at least 60 days. Seedlings should be dibbled out as soon as their seed leaves (cotyledons) open and planted into individual pots.

Trees won't come true from seed, so you'll be more satisfied if you locate a cultivar or specimen that has the features—male or female, thornless, etc.—you want



Rooted cuttings at Brenton Arboretum

and get permission to take cuttings. Root the cuttings in a sterile, well-drained potting mix such as 70:30 perlite/peat (or coarse sand and ground bark). Take eight- to 10-inch-long hardwood cuttings in late winter and keep them in a cool greenhouse or similar environment. Provide bottom heat (about 65 degrees) and keep the soil mix in which the cuttings are placed evenly moist until they have rooted. Ventilation from a fan will help prevent fungal diseases. Softwood cuttings taken in early to midsummer should be treated in a similar fashion. With either technique, use rooting hormone to improve results. Pot up the new plants promptly to avoid root rot, and place them outdoors as soon as weather permits.

After a year's growth, the cuttings can be transplanted in spring just prior to bud-break. Small seedlings may be moved bare root, but larger ones will do better if they have a solid root ball. Set them no deeper than they grew in the container or nursery row, and stake them if needed to develop a straight trunk. In cold climates, mulch them well for the first winter. —G.S.

Rafinesque, who in 1817 called it *Ioxylon pomiferum*. Apparently unaware of Rafinesque's name, botanist and explorer Thomas Nuttall named it *Maclura aurantiaca* shortly afterwards. Nuttall's generic name honored William Maclure, a geologist and longtime president of the Academy of Natural Sciences in Philadelphia. In 1906, German botanist Camillo Karl Schneider resolved the conundrum by combining Nuttall's generic name with Rafinesque's specific epithet.

The list of the tree's common names is extensive, with some derived from Native American languages or French, and others related to whatever the local populace observed about the tree. In Illinois, where I live, we call it Osage-orange or hedge apple; further west and south, we often hear the French *bois d'arc* or a phonetic corruption thereof, bodark.

The "Osage" part of the name derives from the Indian tribe that lived along the

Red River and used—and traded—the tree's valuable wood. The roots of the "orange" part are less certain. The fruits bear a superficial resemblance to unripe oranges, and some claim they give off a citrusy scent when they ripen in early fall. The tree's interior wood is often described as orange—although it's really bright yellow, darkening to a warm brown with time and light exposure. The root bark is orange-colored, which is quite striking since the muscular roots are often visible at ground level.

GARDEN ATTRIBUTES

Osage-oranges offer many valuable attributes for gardens. Start with the fact they are long-lived, sturdy, and—like many hedge trees—quite adaptable, shrugging off floods, droughts, wind, ice, heat, deer, insects, air pollution, extreme soil pH, and about anything else that comes their way.



The author's home in Petersburg, Illinois, was built in a grove of Osage-orange trees, shown here in fall color. Note the yellowish, globe-shaped Osage-orange fruits used as seasonal decorations together with assorted pumpkins in the foreground.

Attractive shade trees in the right site, they offer gold or bright yellow fall color, fissured bark, interesting fruits (on female trees) or fruitlessness (on male trees). They leaf out late in spring, avoiding unseasonable freezes, and cast an open

shadow, allowing the early spring sun to warm cool-season turf or houses under their canopy. Fast growing—up to two or three feet a year under favorable conditions—they may achieve a greater mature height and spread in the Mid-Atlantic and

Southeast than they do in drier areas of the Great Plains and Southwest.

Osage-orange is still a good choice for a hedge plant, but annual pruning is needed to keep it in check. Specimens used as hedging usually retain their thorns, which may be a good thing if the goal of the hedge is to keep animals out. Thorns are clearly not as desirable for a garden specimen, but a number of thornless cultivars exist (see list of cultivars, page 24).

Perhaps the tree's biggest limitation from a gardening perspective is that very few nurseries carry it (see page 22 for sources). If we spread the word, this should change as supply rises to meet demand. For now, we must be content to choose from the one or two selections currently available, or propagate them ourselves (see sidebar, page 22).

NATIONAL CHAMPION TREE

The nonprofit group American Forests coordinates the national Big Tree program, which promotes recognition and protection of the largest trees of all species growing in the United States. For the last few years, the designation of the national champion Osage-orange tree has see-sawed between one at Patrick Henry's Red Hill estate in Charlotte County, Virginia, and one at the American Horticultural Society's River Farm headquarters in Alexandria, Virginia, with Red Hill's tree currently holding the title, at 60 feet tall and 88 feet canopy diameter. But both of those trees are multiple-stemmed, making comparisons with the giant single-stemmed trees found in the Midwest difficult based on the measurement criteria used by the Big Tree program.

—G.S.

EVALUATING AND SELECTING VARIETIES

Until the 1970s, not much was known about the horticultural merits of different selections of Osage-orange. It was around that time that John Pair, a horticulture professor at Kansas State University's Horticulture Research Center near Wichita, observed that Osage-oranges were one of the few shade trees adapted to the rigorous climatic conditions of the Great Plains. In 1980, he asked several woody plant specialists, including me, to send him cut-

tings from the finest Osage-orange trees we knew. The trees grown from these cuttings were established in a trial planting at the research center, which, after Pair's death in 1998, was named the John C. Pair Horticultural Center. Pair selected a few mostly thornless male cultivars along with two females—'Quaker' and the thornless, giant-fruited 'Cannonball'—that are available in the nursery trade.

Other public gardens that feature Osage-orange plantings include the

to have an occasional double leader removed. Vigorous young growth may be slightly thorny, but on the good cultivars this will disappear as they gain a little maturity. Basal sprouts are produced occasionally from grafted trees and should be removed as soon as you see them.

Once you get the trees past the awkward early years, they will pay great dividends for the time you invested in them during their wayward youth. And on the plus side, they will tolerate less

RECOMMENDED CULTIVARS

Here are a few Osage-orange selections worth considering for your garden. With the exception of 'Cannonball', all are male selections.

- 'Altamont' Tall, well-formed crown, nearly thornless
- 'Cannonball' (formerly 'Delta') Bears giant, three-pound fruits
- 'Denmark' Tall, narrow-crowned
- 'Derby' Round-headed, spreading
- 'K-2' Straight, central leader
- 'Smolan' Rugged, well-formed crown
- 'Triple-O' Vigorous, full-crowned
- 'What Cheer' Uniform, full-crowned
- 'White Shield' Vigorous, arching, thornless
- 'Wichita' Stout, well-formed crown, thornless



'Altamont', a semi-thornless selection, growing at the John C. Pair Horticultural Center at Kansas State University.



A neatly trimmed historic Osage-orange hedge borders the property of Winterthur Museum, Garden & Library along U.S. Route 52 near Wilmington, Delaware.

Brenton Arboretum, located west of Des Moines, Iowa, where a collection of Osage-orange trees is being developed; the Olbrich Botanical Gardens in Madison, Wisconsin, which is establishing some plantings in its USDA Hardiness Zone 4 climate, and Starhill Forest Arboretum—the arboretum my wife, Edie, and I established in Petersburg, Illinois—where several of the named cultivars originated.

CULTURE AND MAINTENANCE

Young Osage-oranges are like precocious children, needing some guidance as they grow. They do not shed their dead lower limbs or suckers unless helped to do so with a pruning saw. They may decide to go off in the wrong direction occasionally and need to be reeled in with a hand pruner or lopper. They might lean a little and benefit from staking, or need

than perfect pruning or benign neglect much better than more finicky trees.

In 1978, my wife and I had the good fortune to build our home in Petersburg, Illinois, within a large grove of Osage-oranges originally established in the 1930s. Through selective thinning, we have kept the best of them as magnificent shade trees around our house and outbuildings. When storm winds blow, or freezing rain begins to collect on branches, I can sleep well at night while many of my neighbors are fearful that other kinds of trees might pay them a sudden visit through their ceilings. On top of all of the other attributes and historical associations of Osage-orange, what more could I ask! 🍂

Guy Sternberg is an arborist and landscape architect based in Petersburg, Illinois. He is the author of several books, including Native Trees for North American Landscapes (Timber Press, 2004).



a fresh look at American Arborvitae

BY DANIEL MOUNT

The popular conifer is sometimes overused as a hedge, but with more than 200 selections available, there are many ways it can be incorporated in the landscape.

AMERICAN ARBORVITAE (*Thuja occidentalis*) is as iconic as a white picket fence. Yet, as a garden designer for three decades, I felt it was overused as a hedge or screen plant, and thus avoided including it in my designs. It took planting one such hedge at the insistence of a client to make me give this landscape standard a second look. Since then, I have accumulated a small collection of American arborvitae cultivars on my seven-acre farm east of Seattle, Washington.

After observing my collection for a few years, I was surprised at how well most selections are thriving in my often water-logged soil. That encouraged me to compare notes with other growers around the country to get a sense of just how adaptable American arborvitae are, and which cultivars are most successful in other regions.

ADAPTABLE NATIVE

Thuja is a genus of five species in the cypress family (Cupressaceae), two of

which are native to North America; *T. occidentalis* in the east and *T. plicata* in the west. While most commonly known as American arborvitae or simply arborvitae, *T. occidentalis* is often listed with other common names, including eastern or northern white cedar, swamp cedar, and thuja.

American arborvitae's broad native range is a good indication of its status as a tough, adaptable conifer. It is found in the wild from the south end of Lake

The striking chartreuse foliage of the arborvitae selection 'Gold Drop' stands out above a sea of colorful gloriosa daisies, 'Marguerite' ornamental sweet potatoes, and other bedding plants in this border at Queen Elizabeth Park in Vancouver, British Columbia.

Winnipeg (USDA Hardiness Zone 2) in Manitoba eastward to the Atlantic, and southward near the moderating effects of the Great Lakes. There are a few isolated populations in Illinois, Ohio, and higher elevations of the lower Appalachian Mountains in North Carolina (USDA Hardiness Zone 6). In the far north it is never more than a large shrub, and in the Appalachians a bonsai-esque, wizened old tree. It reaches its maximum potential in the Great Lakes region, where the tallest living arborvitae, at 113 feet, grows in Leelanau, Michigan.

Though American arborvitae thrives in moist or even swampy sites, it can be

THE TREE OF LIFE

Though American arborvitae are prized for landscape uses today, they first attracted attention for entirely different reasons. When French explorer Jacques Cartier and his posse entered the Great Lakes Basin in the 16th century, Native Americans had already been making use of the tree for millennia. They used its rot-resistant wood for canoe frames, baskets, and fishing gear. But it was the healing and refreshing tea made from the leaves that most captivated the explorers' interest. It also led to the tree's common name. When Cartier and other members of his group developed scurvy during the harsh northern winter, Native Americans taught them to drink the vitamin C-rich tea. Their quick recovery—five days, by one account—had Cartier believing he had found *l'arbre de vie*, the tree of life. The name was later latinized to *arbor vitae*. —D.M.

found on limestone bluffs along the Mississippi River and on sand dunes along the Great Lakes. It seems to thrive in crowded stands, which is one of the attributes, along with its ability to regenerate from deer browsing, that makes it such a good candidate for hedges.

HEDGING YOUR BETS

The popularity of American arborvitae shows in the 200-odd cultivars that have been introduced over the years. Of the selections favored for hedging, none is more



Top: The narrow, columnar habit of the arborvitae selection Emerald Green ('Smaragd') complements a formal planting of boxwood in Judy Boxx's Bellingham, Washington, garden. **Above:** Technito ('Bailjohn'), shown on the right, is a relatively new selection with a compact, dense, pyramidal shape suited to smaller gardens.



'Wareana' is a selection from the 1830s that can be used as a low hedge or, as here, a specimen.

widely admired and used than 'Smaragd', or 'Emerald' arborvitae, often referred to in the trade simply as Emerald Green. They seem to make a nearly unbroken hedge from the West Coast to the East, passing through posh suburbs and trailer parks with democratic ease. And for good reason.

'Smaragd' responds well to shearing, is adaptable to a wide variety of soils, propagates readily from cuttings, and retains its bright green color through heat and cold. After its introduction in 1950, it remained a rather obscure shrub until Iseli Nursery in Oregon began to promote it in the early '80s. It caught on like wildfire, quickly replacing 'Pyramidalis Compacta', which had been the go-to arborvitae for northern hedges since its introduction in the early

20th century. Oregon is now the epicenter of Emerald Green production in the United States, producing over 60 percent of those planted in the country each year.

Aside from Emerald Green, conifer connoisseurs are partial to a number of other columnar cultivars. Gerald Kral, a former director of the American Conifer Society who gardens in Rochester, New York, considers 'Degroot's Spire' one of his favorites. He says its narrow, twisting habit and single leader are great attributes. Single-leader cultivars suffer less breakage and splaying from winter snow and ice than the multi-leader forms, making them desirable for harsher northern climates.

Ed Hasselkuss, curator of the Longenecker Horticultural Gardens at the Uni-

versity of Wisconsin Arboretum in Madison, which is home to the nation's largest collection of mature American arborvitae, prefers 'Hetz Wintergreen' (sometimes listed as 'Wintergreen') above all other arborvitae for hedges. In addition to its columnar habit, Hasselkuss appreciates its year-round deep green color, fast growth, and most important, its single leader. A close second is 'Holmstrup'; Hasselkuss says its slow growth and finely textured, tightly bunched, dark green foliage create a unique hedge. He also recommends 'Techny', a broad-based, compact pyramid with deep green foliage. A variant trademarked as Technito ('Bailjohn') has the same assets as 'Techny' but in a much more compact habit, ideal for smaller urban spaces. 'Wareana', a cultivar from the 1830s that has soft sprays of bright green foliage, is one of my favorites, but hard to find.

GLOBOSE AND MINIATURE OPTIONS

While selections with upright, pyramidal shapes are the most prevalent, rounded and dwarf forms are gaining popularity. 'Hetz Midget' is a classic that has been in production for nearly 70 years. It grows very slowly, reaching three feet at maturity, and its stout shoots need little shearing to maintain its fine globose form. 'Woodwardii' is a slightly larger, faster-growing option that also holds its four-foot, rounded shape well with minimal shearing. Among my personal favorites of the globose forms is slow-growing and compact 'Tiny Tim', which tops out around one foot. And I like the relative newcomer 'Bobazam' (trademarked as Mr. Bowling Ball, and newly listed as



Pint-sized with bright golden foliage, 'Harvest Moon' is a popular miniature.

Sources

Forestfarm, Williams, OR. (541) 846-7269. www.forestfarm.com.
Girard Nurseries, Geneva, OH. (440) 466-2881. www.girardnurseries.com.
Meadowbrook Nursery, Marion, NC. (828) 738-8300. www.we-du.com.
Musser Forest, Indiana, PA. (724) 465-5686. www.musserforests.com.
Venero Garden Nursery, Shorewood, MN. (952) 474-8550. www.venerogardens.com.

Resources

Dirr's Encyclopedia of Trees and Shrubs by Michael A. Dirr. Timber Press, Portland, OR, 2011.
Native Trees for North American Landscapes by Guy Sternberg with Jim Wilson. Timber Press, Portland, OR, 2004.

'Linesville' by the American Conifer Society). Its threadlike, silvery juvenile foliage gives it an overall soft appearance, a lovely counterpoint to its crisp, rounded shape, which rarely needs shearing.

For containers and rock gardens, more miniature forms are now available than ever before. Robert Fincham, author of *Small Conifers for Small Gardens*, highly recommends 'Mini Spiral' that only reaches 30 inches tall with a spread of 10 inches. Growing it myself, I can attest to its diminutive charm, featuring wavy sprays of foliage twisting up its tiny trunk. Two other interesting miniatures worth growing are 'Harvest Moon' and 'Amber Glow', both of which boast bright yellow foliage.

COLOR CHOICES

Wild arborvitae often discolor in winter, dulling to a drab olive or even near brown. Because of this, arborvitae breeders have looked for plants that hold their color well year round. Many of the selections mentioned earlier, such as 'Smaragd', 'Hetz Wintergreen', and 'Techny', all share this asset.

Where American arborvitae shines, though, is in the gold and yellow varieties. Hasselkuss admires 'Yellow Ribbon', noting it is the only single-leader golden cultivar to date. Kral lists 'Golden Tuffet',



Shown here planted with salvias and variegated giant reed at Chanticleer gardens in Wayne, Pennsylvania, 'Yellow Ribbon' stands out as one of the best single-leader, columnar American arborvitae selections with yellow or golden foliage.

a spreading cushion of golden-orange juvenile foliage, as a favorite. As a garden designer, I like the 100-year-old cultivar 'Rheingold'. I use it as much for the golden foliage that sets off spring's vibrant tulips as I do for the way it blends with the changing leaves of the autumn garden and holds a somber coppery glow through the winter.

Sandy Dittmar of Iseli Nursery is most excited about an amber form of 'Smaragd' that was found in Poland. Dubbed 'Jan-

tar', which is Polish for amber, it could soon be brightening up hedges across the country. Then there's a semi-dwarf cultivar 'Gold Drop', a seedling of 'Holmstrup' selected by arborvitae expert Clark West of Harrison, Ohio. Its lovely yellow foliage actually gets brighter in winter.

Two new introductions from Christopher Daeger, manager of the Stanley Rowe Arboretum outside of Cincinnati, and his long-time friend and collaborator



'Rheingold', shown here complementing the fall foliage of *Berberis thunbergii* var. *atropurpurea* 'Crimson Velvet', is a relatively compact, spreading selection with golden-tinted foliage.

on arborvitae selection Clark West, will become available through the American Conifer Society this year. Of the pair, named 'Going Up' and 'Going Down', the latter is said to have a distinct bluish cast—a rare hue for American arborvitae, which in its natural state tends to have a yellow undertone to its green foliage.

Some white-variegated varieties are available, but I find them uninteresting. Hasselkuss recommends the large glo-



Mr. Bowling Ball ('Bobozam') has a compact habit and feathery blue-green foliage.

bouse form 'Sherwood Frost', which has tidy white-tipped foliage.

PROMISING NEW SELECTIONS

Much of the excitement in new *T. occidentalis* cultivars has arisen from the collaboration of Daeger and West. Currently Rowe Arboretum holds about 115 of West's selections. At least 34 of those, known as the 'Filiformis' group, were seedlings of a seedling from the cultivar 'Filiformis' that West grew in his Ohio garden. This diverse group shows a great deal of promise with globose, columnar, and pyramidal forms, some with the threadlike foliage of 'Filiformis' and others with the feathery fans of the species. But more importantly, they have inherited heat tolerance from their parent, a step in the right direction for American arborvitae in this time of climate change.

CULTURAL REQUIREMENTS AND A CAVEAT

Though most sources recommend well-drained, slightly alkaline soils, my arborvitae are thriving in heavy acidic soils often flooded in winter and remaining waterlogged long after the rainy season

has passed. So far I have only lost 'Golden Tuffet', probably better off in the well-drained soils of a rock garden. And I only eliminated one, 'Teddy', which after a few good years splayed hideously, a trait shared by many multi-stemmed varieties.

Once properly sited, most arborvitae don't require much maintenance. For keeping hedges healthy, Dave Wagner of Wagner Nursery in Oregon's Willamette Valley, which specializes in large field-grown Emerald Green, recommends a biyearly shearing and topdressing with a balanced (16-16-16) fertilizer each spring. Spider mites can be a pest of arborvitae, so monitor trees in fall by shaking a branch over a piece of white paper. If you observe tiny mites on the paper, treat trees with ultra-fine horticultural oil in fall.

In the wild, American arborvitae is a valuable habitat species, especially in the Great Lakes region where it provides critical winter cover and browse for white-tailed deer. In cultivation, its susceptibility to deer browse is probably the worst failing of American arborvitae. I would go so far as to say it is probably not worth planting without protection from deer fencing in suburban and rural areas where deer are plentiful. My own collection has had no deer damage despite its proximity to a wildlife sanctuary rife with deer, which I attribute to our very large dog, who patrols our property.

LOOKING BACK AND LOOKING AHEAD

Last year while on vacation, I walked the boardwalk trails through the sand dunes of Kohler-Andrae State Park in Sheboygan, Wisconsin, searching for an old stand of American arborvitae on the western shores of Lake Michigan. I had picnicked in that area back in the '70s and the memory of those trees remained vivid. When I finally found them again, I was pleased to see they had not only survived nearly 40 years in pure sand and in full exposure to Wisconsin's harsh winters, but had grown!

This discovery reaffirmed my belief that this tough, adaptable conifer has limitless potential. While I continue to seek out older cultivars to add to my American arborvitae collection, I am equally excited about up-and-coming selections of this garden classic that breeders have in the works. 🌿

Daniel Mount is a garden designer and writer based in Carnation, Washington.

Beautiful Barriers



Protect the perimeters of your garden with prickly but pretty plants.

BY VIVEKA NEVELN

The thick, spine-covered pads of Engelmann's prickly pear (*Opuntia engelmannii*) discourage short cuts through the front yard of this Tucson, Arizona, home.

TO ME, stepping in a planting bed is tantamount to sacrilege because of the damage this does to soil structure and resident plants. So when the mail carrier developed the habit of traipsing through my front border on his way to the next house rather than retracing a few steps to walk around it, I had a dilemma on my hands. At the time, I was trying to establish a flower bed from seed in the space, but the tender seedlings kept getting trampled. Plus the heavy clay soil I had worked so hard to improve with plenty of organic matter was becoming more and more compacted.

Serendipitously, as it turned out, I plunked a young shrub rose in the vicinity. Pretty soon it expanded into the area where the mail carrier left his footprints and, to my astonishment, he began walking around instead of through the bed! Perhaps the rose's shock of hot pink blossoms caught his eye enough for him to realize this was indeed a growing space, but I suspect that its wicked thorns reinforced that any trespassing in the rose's domain was no longer prudent.

SPIKY SOLUTIONS

In addition to keeping people on the straight and narrow, other situations that could make use of prickly plants include near windows for deterring intruders and blocking



A fast-growing, evergreen shrub with sharp barbs along its branches, 'Fiery Cascade' scarlet firethorn (*Pyracantha* sp.) lives up to its name when small, white flowers in spring are followed by sprays of orange berries in fall that turn reddish in winter. It reaches eight to 10 feet in height, so it works well as an informal hedge or trained against a wall.

dangerous areas such as ledges or steep slopes. A living barrier lends more interest and texture to a landscape than any fence can. While many plants make suitable barriers, well-armed ones tend to command a little more respect simply because of the pain factor. Where people or animals may take a short cut through a non-prickly hedge, for example, they almost always will give a thorny one a wide berth.

Various cacti are obvious choices, but there are a number of shrubs, vines, and small trees that have an imposing enough presence to make their points quite clear. These plants either possess thorns (or prickles) along their stems, like roses (*Rosa* spp.) and firethorn (*Pyracantha* spp.) do, or feature sharply pointed foliage—such as certain yews (*Taxus* spp.), junipers (*Juniperus* spp.), and hollies (*Ilex* spp.). Many of these prickly plants also offer ornamental characteristics such as fragrant flowers, showy fruits, fall color, and winter interest to boot.

THORNY ISSUES

There are a few precautions to take when incorporating potentially painful plants into your landscape. Of course, they should be kept away from areas frequented by small children or pets. And remember to account for the plant's mature size so it won't end



Ferocious thorns up to two inches long defend the fragrant spring flowers, top, and downy, seed-filled, yellow fruits, above, of trifoliate or hardy orange (*Poncirus trifoliata*). Its bare, twisting stems also offer winter interest.

Many drought-tolerant succulents make lovely but formidable barriers. In this California garden, artichoke agave (*Agave parryi* var. *truncata*) in the foreground and *Aloe arborescens* behind the low wall guard a small fountain with their rows of curved teeth and needle-sharp tips on their leaves.



'Kembu' false holly (*Osmanthus heterophyllus*) features spiny, evergreen leaves splashed with creamy white variegation. Tiny but very fragrant white flowers bloom from late summer to fall. Well suited to smaller gardens, this slow-growing shrub reaches two to four feet in height and spread.



up growing into walkways or other spaces where you and others could get snagged.

Also, consider your neighbors if you want to use such plants between your properties. Jenny Peterson, a landscape designer in Austin, Texas, recalls an instance where she recommended planting a bigleaf podocarp (*Podocarpus macrophyllus*) hedge between a client's property and the neighbor's. Because of this plant's "pointy leaves," Peterson explains, "the neighbor thought it seemed 'unfriendly.'" In similar situations where you might need to "soften the edges, try planting something more hospitable in front of the prickly plant," she suggests. For this, she likes to use "a lower-growing perennial or shrub such as rosemary."

Finally, keep your own safety in mind. Try to site spiny plants in areas that don't require a lot of maintenance so that you won't have as much cause for getting too close to them. When you do need to work around them, long-handled tools, safety glasses, and thick gloves help keep injuries to a minimum.

With a little planning and creativity, you can make good use of prickly personalities in your garden. These plants offer beauty while providing protective services wherever you need to deter unwanted traffic.

Viveka Neveln is associate editor of *The American Gardener*.



Covered with prickly, compound leaves, Oregon grape holly (*Mahonia aquifolium*) is a good choice for shady areas. Fragrant yellow blooms appear in spring, and dark blue, edible berries ripen in early fall.



The dense, thorny branches of flowering quince (*Chaenomeles speciosa*) help fortify this brick wall while also providing ornamental value in spring with masses of flowers.



These floriferous but very spiny rugosa roses (*Rosa rugosa*) ensure that visitors will use the steps to traverse the different levels of this landscape.

TOP LEFT: JOSH MCCULLOUGH. TOP RIGHT: SUSAN A. ROTH. BOTTOM: JERRY PAVIA

Pierre Bennerup

A colorful second-generation nurseryman, Pierre Bennerup of Sunny Border Nurseries has been an influential figure in the use of perennials in American gardening.



BY ALLEN BUSH

PHOTOGRAPHS BY
KAREN BUSSOLINI

Above: At Sunny Border Nurseries in Kensington, Connecticut, tender perennials such as *Pentas* 'Graffiti Violet' and 'Ruby Glow' and *Angelonia* 'Spreading White' await shipment. **Above right:** Practicing what he preaches, Sunny Borders co-owner Pierre Bennerup prepares to add some new perennials to his home garden.

TODAY, DIVERSE selections of herbaceous perennial plants growing in colorfully branded containers are a familiar sight at any nursery or garden center, but it wasn't always that way. Flash back to 1960, and if you went to a nursery looking for a perennial, you would likely have had a choice between three or four bareroot plants languishing in two-quart wooden baskets.

The person who came up with the idea of selling perennials in containers is Pierre Bennerup, co-owner of Sunny Border Nurseries, a wholesale company in Kensington, Connecticut. The breakthrough was just one of many attributed to the energetic 79-year-old Bennerup, who is widely regarded as an innovator and visionary in the American nursery industry.

According to peers, he has an uncanny knack for anticipating and implementing new trends in the production and marketing of perennials, grasses, vines, and herbs.

"I firmly believe that the perennial industry would not be where it is today without Pierre," says David Culp, Sunny Border's vice president of sales and marketing. "His leadership and passion for plants have made him an icon in the perennial industry as well as in American horticulture." Culp, who has worked with Bennerup for 20 years, is also a garden book author and a noted hellebore breeder.

Colleagues and friends describe Bennerup as intelligent, sophisticated, and opinionated. "Pierre is witty and has such a great sense of humor about the work that we do," says Maryland nursery owner and ornamen-

tal grass expert Kurt Bluemel, a longtime friend. “If you’ve ever read the annual letter in his catalogs over the years, you know exactly how clever this horticulturist truly is.”

FAMILY LEGACY

Bennerup is a second-generation nursery owner. His father, Robert Bennerup, was born in Denmark at the turn of the 20th century. He immigrated to the United States in 1923 at the age of 20 and found

home in Norwalk, Connecticut. Fifteen years later, Robert Bennerup bought 135 acres and a house near Kensington for \$18,000. Sunny Border Nurseries has been there ever since.

Notable gardeners and horticulturists often relate heartwarming tales of their childhood experiences with plants, but not Bennerup. “I’m not sure I was born with an interest in plants, but my father was a landscape designer and nurseryman,

Looking for an excuse to stay in the Bay Area, he took a job teaching 7th and 8th graders at the Menlo School in Atherton, California. Looking back, Bennerup recalls he was a constant target for the pranks of the adolescent boys. “There wasn’t a day that went by that they didn’t figure out some way to torment me,” he says.

Teaching didn’t strike a chord any more than law. In 1969, the restless 35-year-old Bennerup moved back east and settled in New York City.

RESCUING THE FAMILY BUSINESS

Bennerup may not have been born with a love of plants, but the nursery business seems to have been ingrained in his DNA. Robert Bennerup died in 1967 after a long illness, and two years later, Pierre purchased the struggling nursery from his mother. At this point in his life, he embraced the challenge of owning his own business and was motivated to make the nursery more successful than his father had.

Initially, however, Bennerup wasn’t able to make a living from the nursery, so he signed on as a salesman with Banfi Vintners. The New York-based company obtained the North American rights to Riunite, a varietal of Lambrusco that in the

1970s became a blockbuster success with the catchy marketing jingle: “Riunite on ice, that’s nice.” Finding his niche as a salesman and marketer, he worked his way up the company ladder, eventually becoming corporate vice-president.

For the first decade of his operation of the nursery, he acknowledges being something of an absentee owner, returning to Kensington on

weekends to weed, ship orders, and do the books. Because of that, he had to find and train capable staff to run the nursery.

One of Bennerup’s first hires was Marc Laviana, who as a 15-year-old was brought on part-time in 1969. “If I worked hard after school, Pierre told me, I could work the summer,” Laviana recalls. Laviana, who started working full-time in 1974, was an integral part of Sunny Border’s operations during the phenomenal growth in consumer demand for perennials that started in the 1980s. “Pierre’s vast experience



Above: Five-year old Pierre Bennerup strikes a pose in his parents’ Victory Garden. **Right:** An early view of Sunny Border taken not long after it was founded in 1929 by Pierre’s father, Robert Bennerup.

work, first as an estate gardener and, a short time later, as a nurseryman. He met his wife, Claudia Audet, a French Canadian, while she was working as a governess in Westchester County, New York. When winter work was scarce in New England, Robert went south and sold flowers door to door in Miami, Florida. His education and skills eventually attracted the attention of some well-known landscape designers, including Beatrix Farrand. Robert later named a dianthus ‘Beatrix’ in her honor.

The first Bennerup nursery was founded in Tuckahoe, New York, in October 1929, two weeks before “Black Friday,” the beginning of the Great Depression. In 1933, Pierre was born a few miles away in Bronxville, New York. One of his first memories, as a three-year-old, was his father’s backyard pansy crop at their new



so I was required to pull weeds when I was a kid,” he says. “I hated it then, although now I love doing it.”

A bright student, he became the first graduate of Connecticut’s Berlin High School to go to Princeton University, where he majored in English. If you ask him about his lack of formal training in horticulture, he’s proud of the fact his expertise came through hands-on learning and reading.

After Princeton, Bennerup briefly attended law school at the University of California before deciding it wasn’t for him.

in sales and marketing has changed the course of the industry and Sunny Border, too,” says Laviana, who is now co-owner and president of the nursery. “He’s always been an innovator with new ideas. I’d call him a strategist visionary and then some.”

In the early 1970s, perennial plants were primarily sold bareroot. Wholesale growers such as Walters Gardens in Zeeland, Michigan, and Springbrook Gardens in Mentor, Ohio, grew hundreds of acres of perennials in sandy soils and shipped nationwide to mail-order firms. In turn, the firms put their inventory into

mand for foundation plantings created by the boom in home construction following World War II. The soil in that area of Connecticut is a clay loam, ideal for producing balled-and-burlapped yews, but not for perennials, which couldn’t be dug after rains as quickly and easily as they could in the sandy soils of Bennerup’s bigger competitors.

With the market for perennials expanding in the 1970s, Bennerup needed to come up with a solution. It was at this point that he decided to take the digging out of the equation and grow plants in

“People who buy fine wines are often the same as those who buy perennials. They are experimental, always trying different things, not always Budweiser or red geraniums.” By the mid-’80s, the popularity of perennials was soaring and sales at Sunny Border were growing exponentially.

UNITING PERENNIAL GROWERS

Some entrepreneurs are content to simply enjoy their own success, but Bennerup saw value in helping his fellow perennial plant growers succeed as well. “Pierre has always been an advocate of



A recent aerial photograph of Sunny Border shows the extent of the nursery’s expansion since Pierre Bennerup assumed its operation in the late 1960s.

coolers until it was time to ship in spring and fall. Perennials such as moss phlox (*Phlox subulata*) and evergreen candytuft (*Iberis sempervirens*) were field-dug, thrown into two-quart wooden baskets, and placed on sale in retail nurseries, but few other perennials had the durability to withstand that kind of rough handling.

In the ’50s and ’60s, Sunny Border had converted a large part of its operation to field-grown production of yews (*Taxus × media*) in order to meet the huge de-

pots. “Pierre was the first person to grow perennials in containers,” says Laviana. The revolutionary practice was quickly adopted by other growers and soon became the industry standard.

In 1980, Bennerup resigned from Banfi to devote himself to the nursery full-time, successfully adapting the management, sales, and marketing experience garnered in the wine industry. “The skill sets I learned at Banfi were very helpful in establishing a market for fine perennials,” says Bennerup.

horticulture—willing to share his knowledge with colleagues—and potentially competitors—in order that the perennial industry may continue to be advanced,” says John Walters, chief executive officer of Walters Gardens. “He has put the greater industry ahead of personal gain.”

A perfect example of this is Bennerup’s role in founding the Perennial Plant Association (PPA), which is now an influential industry group with more than 1,200 members in North America and overseas.



1998. He was also instrumental, says Still, in the establishment of the PPA's Perennial Plant of the Year program.

Bennerup also has been active with state horticulture groups, serving as founder and first president of the Connecticut Chapter of the Hardy Plant Society and as president of the Connecticut Horticultural Society.

SETTING—AND BUCKING—TRENDS

As a wholesale nursery, Sunny Border sells to independent garden centers and directly to landscapers. Bennerup's guiding philosophy is that foliage—not flowers—is the key to successful gardens and landscapes. He elucidated this in the letter he wrote in his 2013 catalog, under the theme "Green is a color, too." Taking issue with what he terms "lipstick landscapes," Bennerup stated, "I believe a good perennial garden is mostly foliage—various shades of green, bronze, silver, and gold. It's soothing. It's cooling." He adds, "Flower color in the garden should be savored in small portions like dessert. Too much color causes garden obesity."

This approach bucks the trend set by many other wholesale nurseries and greenhouses, particularly those catering to Big Box stores. Bennerup says these companies have streamlined their offerings with a focus on two primary criteria: short and in-flower. If plant pots can't

Left: In his home garden, Bennerup backs up his philosophy that perennials should be valued as much for their foliage than they are for their flowers by showcasing combinations like this one of *Hakonechloa macra* 'Aureola', *Heuchera* 'Molly Bush', and *Hosta* 'Great Expectations'.

The idea of forming a trade group for perennial plants took shape in 1983 during a perennial plant symposium held at Ohio State University (OSU) in Columbus. The conference was organized by Steven Still, who was an OSU horticulture professor at the time. Among the participants was Bennerup, who gave presentations on propagation by cuttings and container production of perennials at Sunny Border. The symposium was a huge success, with some 250 people in attendance.

At the end of the meeting, Still says, about two dozen attendees got together

to "lay out what a new association would look like." Bennerup and three other perennial-nursery owners—Aine Busse of Busse Gardens in Minnesota, Jim Beam of Sunbeam Farms in Ohio, and Jim Kyle of Spring Hill Nursery in Ohio—agreed to meet again a few months later. Each put up \$250 to cover office supplies, stamps, and printing costs to get the new organization up and running. The PPA was incorporated late in 1984, and Still became its first executive director. Bennerup served as president for two years in 1986 and 1987 and received the PPA's Award of Merit in

be squeezed on a shipping rack in full bloom, there's a growing chance you're not going to see them sold in the Big Boxes at all. "They're promoting a fallacy," says Bennerup. "You can have a wonderful garden without any flowers."

He wonders aloud why anyone would want to watch a mass of annuals all season long. "The idea of different plants blooming at different times is the miracle of nature and gardening," he says. "Unless you appreciate that miracle, you'll never be a gardener." Of course, his preference is for people to rely on perennials

to create ever-changing bloom throughout the season.

An unabashed purist at heart, Bennerup estimates that only about one in 10 people have the knack to become a gardener in the way he defines it. “Perennial gardening is about subtlety, form, fragrance, texture, calm, and sometimes even sound and motion; in fact, all the senses, not just sight,” he says. “Will everyone buy into this? Absolutely not! But all we need is to appeal to that constant percentage of discerning, dedicated gardeners. If we set the tone, they will follow and so will others.”

NOTABLE INTRODUCTIONS

Of the many noteworthy plants that have been introduced by Sunny Border, perhaps the best known is *Veronica* ‘Sunny Border Blue’, a sturdy hybrid of *Veronica subsessilis* that Robert Bennerup discovered in the late 1940s. By the time the younger Bennerup took over the nursery, however, the signature plant was no longer being grown. After doing some detective work, Pierre located a plant and reintroduced it in the early 1980s. It was named the PPA’s 1993 Perennial Plant of the Year and remains popular today.

Other popular introductions have included purple coneflowers (*Echinacea* spp.) such as ‘Kim’s Knee High’ and ‘Mop



Among the many perennials introduced by Sunny Border is *Echinacea* ‘Kim’s Mop Head’, a compact, white-flowered selection of purple coneflower.

Head’, ‘Stairway to Heaven’ Jacob’s ladder (*Polemonium* sp.), *Knautia* ‘Thunder and Lightning’, and several new *Coreopsis* hybrids bred by Darrell Probst.

Bennerup benefits from a keen eye for potential new plants, notes Steven Still. “A

good example of that is his introduction of *Dianthus* ‘Feuerhexe’ (Firewitch),” says Still. “He saw it in flower on an excursion in the Netherlands, procured it, and brought it back to the U.S. It later became the Perennial Plant of the Year.”

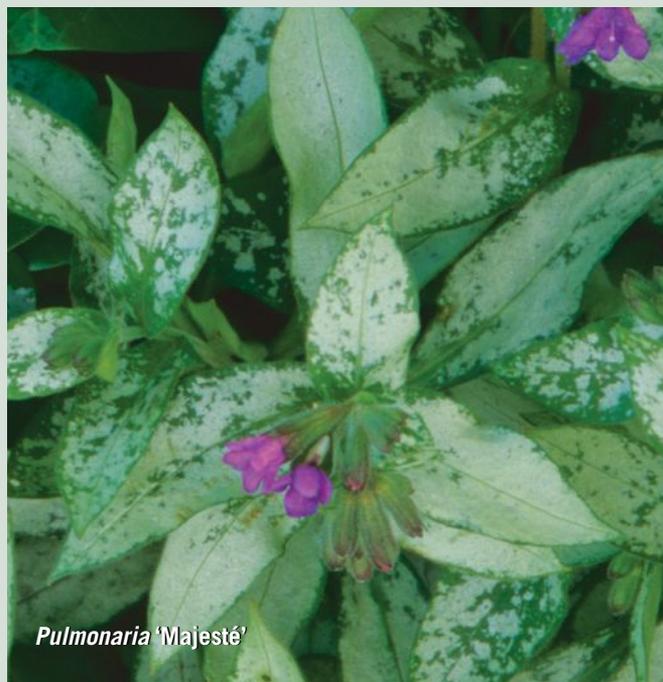
In recent years, Bennerup has become excited about the promise of “tender perennials”—generally subtropical plants that are not frost hardy. He coined the term “temperennials” and Sunny Border has introduced a line of them under the marketing name Bodacious Temperennials™. “I like the big stuff like bananas and brugmansias,” says Bennerup. “I also like succulents—agaves, aeoniums, and phormiums.”

Bennerup has a friendly rivalry with the woody plant and annual growers he competes against for scarce disposable spending from gardeners. He likes to tease tree growers that they’re raising cordwood. A neighboring bedding plant grower in Cheshire, Connecticut, called perennials “glorified weeds.” Pierre responded by comparing perennial enthusiasts to consumers of fine wine. “Annals are for beer guzzlers,” he countered. Yet he also doesn’t hesitate to infringe on the opposition’s turf when an opportunity presents itself. In 2006, he discovered and introduced a variegated basil called

A FEW BENNERUP FAVORITES

In addition to being a fan of perennials with interesting foliage, Pierre Bennerup says his favorite plant “tends to be whatever is blooming at the moment.” He does admit to affinities to certain families or genera, such as the primrose family, the ranunculus family, the genus *Epimedium*, the genus *Hakonechloa*, the genus *Saxifraga*, and the genus *Phlox*. Here are some of his favorite individual perennials, including a few introductions by Sunny Border.

- Athyrium niponicum* ‘Pictum’
- Actaea* (syn. *Cimicifuga*) ‘Brunette’
- Coreopsis* ‘Mercury Rising’
- Epimedium grandiflorum* var. *higoense*
- Geranium* ‘Rozanne’
- Hakonechloa macra* ‘Aureola’
- Heuchera* ‘Molly Bush’
- Pulmonaria* ‘Majesté’
- Tiarella cordifolia* var. *collina* and crosses
- Veronica* ‘Sunny Border Blue’



Pulmonaria ‘Majesté’



Above: This part of Bennerup's garden features *Rudbeckia maxima*, *Astilbe chinensis* 'Pumila', and *Macleaya cordata*. Right: Bennerup surveys his home vegetable garden.

'Pesto Perpetuo'. A quarter million of them were sold last year.

AT HOME IN THE GARDEN

Bennerup and his wife, Cheryl, share a three-and-a-half-acre garden at their home in Kensington. They have been married six years and Cheryl wears many hats at Sunny Border, including pest and disease oversight, writing and editing catalog copy, maintaining display gardens, and directing part-time students and interns.

I have been to their home many times, but until my most recent visit, I had not observed how Bennerup was putting his plant philosophy into action in his own yard. In the formal courtyard are shades of colorful and textural foliage: totems

of gray-green *Macleaya cordata* and the chocolate-maroon leaves of *Ligularia dentata* 'Britt-Marie Crawford'. There are also flowers, of course. The yellow flower-heads of *Rudbeckia maxima*, which resemble little sombreros, and the wispy lavender inflorescences of *Thalictrum rochebrunnianum* are the exclamation points. No doubt, colorful flowers will always be the money strokes, the fussy and ephemeral detail that breeders get so worked up about.

You can take the man out of the nursery, but you can't take the nursery out of the man. Even in the calm oasis of his home garden, Bennerup is still thinking about the future and anticipating trends. In his estimation, by 2025 80 percent of all perennials will be produced by three or four highly

sophisticated mass producers. "They will ignore 99 percent of possible plant choices in favor of 50 sock-'em-in-the-eye color selections," he predicts. Bennerup imagines that there will be a few conscientious nursery owners who will be left to supply the remaining 20 percent of the market. Tens of thousands of perennials will be up for grabs.

Guess which group Bennerup will be in. His 2013 wholesale catalog has nearly 3,000 listings, not including more than 1,000 in the Bodacious Perennials™ line. He expects Sunny Border to lead the charge for new introductions and continue to trumpet many of his old favorites for years to come.



For a man who hated weeding when he was a kid, he's come a long way. "I get so much enjoyment from gardening and plants," he says. "It's such a great gratification. We are connecting with the real world." I stop to scribble his words on my notepad, and when I turn around, Bennerup has disappeared into his woodland garden, still talking plants.

Director of Special Products for the American office of Jelitto Seeds and a contributor to the Garden Rant blog, Allen Bush lives in Louisville, Kentucky.

The Sweet Sensation of Asian Pears

by Kris Wetherbee

NOTHING CAN quite match the waterfall of juicy sweetness and crisp texture of a homegrown, tree-ripened Asian pear. When my husband and I moved to Oregon over 20 years ago, we planned to grow a few trees, but after reading about the different varieties, we ended up with more than 100 Asian pear trees and nine different cultivars in our first orchard.

As the oldest known cultivated pear, Asian pears (*Pyrus pyrifolia*) combine the best traits of apples and European pears—enticingly sweet, crisp, and juicy, with a complexity of flavors that includes hints of butterscotch, brandy, apricot, and undertones of a light-bodied yet lively wine. Colors of the thin-skinned fruits range from moonlit yellow or yellow-green to butterscotch-orange and russet. Japanese varieties are round, while Chinese varieties are often pear-shaped.

One characteristic that really sets Asian pears apart from European pears is that their fruit must be tree-ripened for peak flavor and sweetness. Once picked, the fruits of Asian pears will not ripen further. By growing your own, you can harvest ripe, sweet fruit with unsurpassed flavor.

GROWING GUIDELINES

Asian pears can be grown in USDA Hardiness Zones 4 through 9, although some of the Chinese cultivars can withstand temperatures down to minus 30 degrees Fahrenheit (F). The trees tolerate heat and humidity and need only 300 to 600 hours of winter chilling (temperatures above freezing but under 45 degrees F) to set fruit, so they can be grown in most regions of the country.

For best fruit flavor and production, grow Asian pears in a site that gets full sun and has free-draining, slightly acidic soil—a pH between 5.9 and 6.5 is ideal.

Water needs differ depending on soil conditions and location. Young trees need to be watered deeply once a week;



As with all Asian pears, the fruits of the variety ‘Shinko’ should be harvested only when they are ripe. Stored in a cool environment, the pears can remain fresh for several months.

trees five years and older can get by with less frequent watering. The more water a tree receives during the growing season, the bigger and juicier the fruit will be.

PLANTING BASICS

Getting Started Set out bareroot trees in late winter or early spring. Potted trees can be planted anytime during the growing season. Set trees so that the graft union (it will appear as a scar or knob on the trunk) remains two to four inches above the soil.

Spacing Space trees 12 to 15 feet apart in well-drained, slightly acidic soil.

Days to Harvest Depending on your growing climate, location, and variety, fruit is ready to harvest from mid-July to early October. There is usually a light harvest the first year after planting; larger harvests begin the second or third year after planting. —K.W.

Mulching with compost annually will both feed trees and conserve soil moisture. An occasional dressing of rock dust (also called mineral fines) every three to five years adds essential trace minerals, resulting in more flavorful fruit. Do, however, go easy on the nitrogen; if the trees are growing more than two feet per year, they’re getting too much nitrogen, which can affect fruit flavor, increase susceptibility to bacterial diseases on young trees, and lead to winter damage on tender growth.

Asian pear trees are easily maintained at 10 to 15 feet tall, even when mature. Trees begin bearing fruit at two or three years old and will live for 50 years or more. Mature trees will produce 30 to 50 pounds of fruit or more a year. In fact, the trees are so productive that they tend to overbear, sometimes producing five to eight fruits per cluster.

Thinning the fruit is essential for large, flavorful pears, to prevent alternate-year bearing, to reduce insect damage (two fruits touching provide

an excellent area for codling moths to lay their eggs), and to keep limbs and branches from breaking under too much weight. Thin fruits when they reach cherry size, leaving one per cluster or every five or six inches.

DISEASES AND PESTS

Two of the most common bacterial diseases that plague pears are fireblight and pseudomonas, which cause infected branches to appear scorched, with blackened leaves remaining attached. The best control is to prune affected branches 12 to 15 inches below the infection. Sterilize pruning tools between each cut by dipping them in rubbing alcohol or a 20 percent solution of household bleach and water. A copper spray, applied during the bloom period to control fireblight, or before blossoms open or in fall for pseudomonas, may help reduce damage from these diseases.

A dormant oil spray will destroy many overwintering insects and deter disease,

Sources

One Green World, Molalla, OR. (877) 353-4028. www.onegreenworld.com.

Stark Bros Nurseries & Orchards, Louisiana, MO. (800) 325-4180. www.starkbros.com.

Willis Orchard, Cartersville, GA. (866) 586-6283. www.willisorchards.com.

but codling moths require additional measures. I've found that releasing parasitic *Trichogramma* wasps is the easiest and most effective control. Release them when moths are flying and laying eggs; this typically occurs in spring.

RECOMMENDED CULTIVARS

Most Asian pears are partially able to self-pollinate, but planting at least two or three different cultivars will enhance fertilization and fruit quality. Ripening dates listed here are for the Pacific North-

west and will vary from two to four weeks earlier in the South, and one to three weeks later in cooler northern climates.

'Large Korean' Also known as 'Korean Giant', fruits have a gold-bronze russet skin with white flesh. Fruits are very rich, sweet, and juicy and can weigh up to a pound each. Ripens late—about mid-October—and is fireblight resistant. **'Nijiseiki'** Also known as '20th Century', the mildly aromatic, bright yellow-green fruits are large and sweet, with crisp, juicy, white flesh. Reliably productive medium-large fruits ripen in late August.

'Seuri' Chinese variety with dark orange skin and deliciously crisp, white flesh. The round fruit is aromatic, very sweet, and distinctively flavored with hints of apricot; they ripen in late September to early October.

'Shinko' Large round fruits with bronze to dark golden skin are favored for their sweet, richly flavored, yellow-white flesh boasting subtle tones of butterscotch. Fruit ripens in mid-September to early October.

'Shinseiki' Faintly aromatic fruits are round and smooth, with pale yellow skin and delicately sweet, firm-textured, and juicy white flesh. It's reliably productive, with medium to large fruits that ripen in late August.

ENJOYING THE HARVEST

Depending on the variety and where you live, tree-ripened fruit is ready to harvest from about mid-July to early October. Wait until the fruit's skin changes to a paler green color, then begin tasting pears to determine when they are ripe. The fruit should be sweet but still firm and crisp. The tender skin bruises easily so handle fruit gently.

Use the fresh pears in fruit salsas or toss in a fruit salad. The flavor intensifies when poached, baked, or sautéed, and is outstanding in muffins, breads, pies, and other baked goods and desserts.

Asian pears store well, with many varieties retaining their quality for up to five months in a cool environment (about 34 degrees F). The fruit can also be frozen or dried. Of course, the fruit is delicious eaten fresh, especially when picked right from the tree. 



If you have limited space, Asian pears can easily be trained as an espalier or on a trellis, as with the selections 'Shinseiki' and 'Nijiseiki' shown above.

Freelance writer Kris Wetherbee lives in Oakland, Oregon.

Deterring Deer

by Scott Aker

WITHOUT A doubt, deer are one of the major causes of gardener discouragement. Just when the garden is reaching its peak, tomato plants are nibbled to fruitlessness, yews are munched to a framework of branches, and Asian lilies are decapitated just before they open.

Some may argue that the deer have always been around, and that it is humans who have moved into their territory. This may be so, but thanks to a lack of predators, deer populations have exploded in many areas of the country. If you garden in one of these areas, you will have to cope with deer one way or another.

Deer do most of their damage when browsing, evidenced by leaves and small branches clipped off with a telltale ragged edge. Once deer find a suitable dining spot, they habituate to it, and it becomes more difficult to persuade them to eat elsewhere. It is therefore very important to prevent browsing.

The other common type of deer damage is done by bucks when they rub the velvet off their newly grown antlers in the autumn. Usually, they target a young tree that has suitably rough bark and is still flexible. To protect young trees from deer-rub damage, you can either coil a plastic tree guard around the trunk, or encircle the tree with stakes. Use sturdy stakes spaced about a foot apart and driven deep enough into the ground to withstand pushing (you can attach black plastic mesh to the stakes as an additional precaution).

DEER MANAGEMENT STRATEGIES

The success of deer management strategies in your garden depends on your circumstances. If you are dealing with just a few deer, and there is a nearby woodland that has understory plants that they can use for food, you may only need some mild persuasion in the form of repellents to keep them away from your garden.



The most common types of deer damage are browsing, as shown on this row of lettuce, left, and bark loss caused by male deer rubbing velvet off their antlers on tree trunks, right.

The best repellents are based on putrescent egg solids or blood meal. Their odors indicate predator activity, theoretically causing deer to look elsewhere for a meal. Some repellents use various spices and pepper extracts to repel deer by making plants less palatable to them, but these tend to last for a shorter period of time. It's a good

idea to rotate the types of repellents so the deer don't get accustomed to an odor; you could alternate between two products such as Bobbex™ and Plantskydd®. Although these products may deter deer for up to two months in late summer and autumn when plant growth has slowed, it is important to apply them frequently—every six to 10 days—during periods of rapid plant growth in spring.

If you are faced with a large deer population, and they are desperate for food, repellents may not be enough of a deterrent. Exclusion then becomes your main strategy. Conventional chainlink, rail, and picket fences aren't effective against deer, unfortunately, because deer are great jumpers—able to clear a 12-foot fence if they have a run at it. They can also slink under a fence if there is a gap between it and the ground.

The best barriers for deer exclusion are mesh netting and electric fences. Mesh netting fences take advantage of the fact that deer are far-sighted—like most prey



Deer repellents are most effective if applied regularly, especially in spring.

Gardening Q&A with Scott Aker

SPARSELY FRUITING CURRANTS

I planted some red currant bushes in fall two years ago. The following spring they each produced a few currants. But despite good sun exposure and regular watering, I didn't get any currants this year. What can I do to encourage the plants to set fruit?

Currants often don't produce heavy crops until their third year, so be patient. This coming spring, make sure the bushes are protected from the wind, and mulch them with straw or grass clippings to conserve soil moisture. Keep the soil evenly moist, particularly when the fruits are developing. If hot weather arrives early, the fruits may drop before ripening. Providing temporary light shade with netting or a lattice may help prevent this.

DEALING WITH TOUGH-TO-REACH WEEDS

My small patio is made of pavers set in stone dust. Weeds keep coming up in the spaces between the pavers, and I never seem to be able to get enough of the roots when I weed. I don't want to use an herbicide. Any advice?

You might have better luck pulling the weeds cleanly if you do it after a soaking rain or watering the patio. If you are starting with a lot of weeds and the patio is in a sunny location, you can try solarization. First water the patio thoroughly, then dig a shallow trench around it. Second, place a sheet of clear plastic over it and bury all the edges. A few weeks of exposure to sun will kill most of the weeds. If the patio is in shade, you can pour boiling water on the weeds or kill them with a propane torch. To reduce future problems, regularly use a broom or blower to remove seeds from the patio before they have a chance to grow. —S.A.

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



Designing with deer-resistant plants, such as hellebores, above, and alliums, left, is a good strategy for preventing problems.

current during cloudy weather. The fence must also be well grounded in reasonably moist soil so the deer completes the circuit when it touches the bait.

One other electrical option that is less obtrusive than a fence consists of a stake containing a capacitor that is powered by two AA batteries. Wireless Deer Fence™ stakes deliver a substantial jolt, and I have found them to be an effective option, particularly for small gardens or for protecting individual plants that deer love to eat, such as hostas and lilies.

DEER-RESISTANT PLANTS

If you don't want to use repellents or fences, another approach is to redesign your garden to feature plants that deer won't find as tasty. For that reason, peonies, irises, yarrow, hellebores, and foxgloves are now mainstays of my own garden. I grow plants that are more prone to deer browsing close to my house, where deer are less likely to venture. In my edible garden, deer tend to avoid prickly raspberry canes and the astringent foliage or fruit of persimmon trees. They also seldom eat cucumbers, onions, and cabbages. There are, of course, too many deer-resistant plants to include here, but you can find lists in various garden books and websites. 🍷

Scott Aker is a horticulturist based in the Washington, D.C., area.

animals—and cannot see things that are close to them very well. The fine black plastic filaments of the mesh are especially difficult for them to see, so deer tend to run into the barrier, which to them seems like an invisible and startling force field. Because they can't see it, they aren't inclined to try to jump over it, so a six-foot-high mesh fence is effective. Be sure to securely bury the bottom of the mesh so they can't get under it.

Baited electric fencing is also effective. Enclose the area to be protected with a single or double electrified wire that has aluminum clips attached at intervals. Bait the clips with peanut butter, which deer find irresistible, and any nibble results in a mild but startling electric shock. If running a low-voltage line to your fence is not an option, solar-powered models exist, but you need to have battery storage to maintain electrical

Horticultural News and Research Important to American Gardeners



Visitors' top three favorite new annuals at selected North American public gardens this past summer were, in order of popularity from left to right: Lanai® 'Candy Cane' verbena, Zahara™ 'Cherry' zinnia, and SunPatiens® 'Compact Electric Orange' impatiens.

VOTES ARE IN FOR THE YEAR'S HOTTEST NEW ANNUALS

This past summer, visitors at 31 North American public gardens once again had the chance to vote for their favorite new bedding plants to receive the American Garden Award. *Verbena* Lanai® 'Candy Cane' from Syngenta Flowers ranked highest, beguiling beholders with masses of starry flowers. Close behind in popularity were PanAmerican Seed's disease- and drought-tolerant Zahara™ 'Cherry' zinnia and Sakata Ornamentals' newest addition to its SunPatiens® line of sun-loving impatiens, 'Compact Electric Orange.' For more details about the awards program and the winners, visit www.americangardenaward.com.

NEW PESTICIDE LABELING AIMS TO PROTECT POLLINATORS

Because certain types of pesticides have proven toxic to honeybees, the Environmental Protection Agency (EPA) now requires these products to be labeled accordingly. In particular, labels must include a "Protection of Pollinators" advisory box to alert users that applications of the potentially harmful chemicals are prohibited when bees and other pollinators are present. The labels also will

have information about preventing the pesticides from traveling beyond target areas and causing more widespread environmental damage.

"Multiple factors play a role in bee colony declines, including pesticides," says Jim Jones, assistant administrator for the EPA's Office of Chemical Safety and Pollution Prevention. "The EPA is taking action to protect bees from pesticide exposure and these label changes will further our efforts." Learn more about the new labeling requirements at www.epa.gov.



Updated EPA-required pesticide labeling aims to better protect honeybees.

BROOKLYN BOTANIC GARDEN SUSPENDS RESEARCH PROGRAM

In late August, the Brooklyn Botanic Garden (BBG) in New York announced that it had suspended its Science Center research programs and laid off three employees, including the staff of the herbarium and manager of its New York Metropolitan Flora Project. The suspension was attributed to chronic structural problems with the Science Center building and a budget shortfall.

A number of the garden's members and supporters have expressed concern that the move is a step backward for the BBG's scientific research programs, but according to BBG President Scot Medbury, "Our commitment to scientific research as a fundamental part of the Garden's mission is unwavering. We will use this transition period to refine the focus of our research program and strengthen its base of financial support."

While the BBG explores ways to fund a new Science Center building and programs, the more than 300,000 preserved plant specimens in the herbarium are being temporarily moved to climate-controlled storage. "BBG has successfully re-imagined its research programs several times in its 100-year

PEOPLE and PLACES in the NEWS

Ball Horticultural Company CEO Inducted into Floriculture Hall of Fame

Anna Ball, CEO and third-generation owner of Ball Horticultural Company based in West Chicago, Illinois, became the newest member of the Society of American Florists (SAF) Floriculture Hall of Fame in September. “The Floriculture Hall of Fame is truly the floral industry’s highest achievement,” says SAF Awards Committee Chairman Terri Nell. “It means that the recipient has made a permanent and significant contribution to the advancement of floriculture.” In addition to her infectious passion for flowering plants, Ball received this honor for her extensive efforts to promote the floral industry as a whole. To learn more about the Floriculture Hall of Fame, visit www.safnow.org.



Anna Ball

Tony Avent Receives Perennial Plant Association 2013 Award of Merit

Tony Avent, president of Plant Delights Nursery in Raleigh, North Carolina, has received the Perennial Plant Association’s highest honor, the Award of Merit. This prestigious award recognizes Avent’s “outstanding career achievements in propagation, production, and retail marketing success with the perennials.”



Tony Avent

Avent founded his nursery and Juniper Level Botanic Gardens in 1988, both of which are known for their unusual and rare plant species. Avent has bred and introduced numerous new cultivars and he is an accomplished plant hunter who has brought back many exciting species from around the world. He tirelessly promotes perennial plants through his nursery website and catalog as well as through magazine and newspaper articles. Possessed of a wry sense of humor, Avent also has made entertaining and enlightening television appearances on the “Martha Stewart Show” and various PBS programs.

history, and this is another such juncture,” says Medbury. No timeline was announced for construction of a new facility. For more about the Brooklyn Botanic Garden, visit www.bbg.org.

PLEASE PET THE PLANTS

While there’s still little evidence that talking to your plants is beneficial to them, a recent study indicated that stroking them may actually pay off by helping plants ward off diseases. Prior research has shown that damaging cells produces an immediate biochemical immune response in plants. Building on this discovery, further experimentation has demonstrated that a similar response results from simply touching leaves rather than wounding them.

According to the paper, published September 13, 2013, in the journal *BMC Plant Biology*, “these results highlight the remarkable ability of plants to sense external mechanical stimuli and activate a powerful

defense response.” Exactly how plants are able to do this is still under investigation. To learn more, visit www.biomedcentral.com.

A HELPING HAND FOR HABITATS

To promote “wildscaping,” or creating bird and pollinator habitat through gardening, several conservation-oriented entities are collaborating on a new pro-



gram, “Be a Habitat Hero.” The program aims to help people in the western United States “build positive connections between their yard and the surrounding landscape,” says Susan Tweit, communication director of the Terra Foundation, which is one of the program partners.

The program encourages planting natives and regionally adapted plants that

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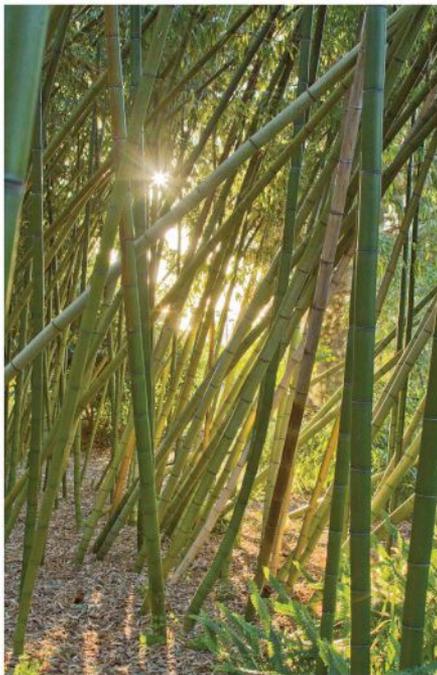
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offer year-round sources of food and shelter; reducing lawn areas; limiting or foregoing the use of synthetic chemical pesticides and fertilizers; and controlling invasive species.

Two garden-related groups are also part of the effort: Plant Select and High Country Gardens. Administered by Denver Botanic Gardens and Colorado State University, Plant Select's mission is to "seek out, identify, and distribute the best plants for landscapes and gardens from the intermountain region to the high plains." Many of these plants make good choices for creating "natural settings for birds and other pollinators, while saving water," says Plant Select Executive Director Pat Hayward.

New Mexico-based High Country Gardens nursery is known for its hardy, drought-tolerant plants. Next spring, it plans to offer a "Habitat Hero" Birdwatcher Pre-planned Garden created by renowned garden designer Lauren Springer Ogden.

The Audubon Rockies, part of the National Audubon Society, is the final Be a Habitat Hero partner. Based in Fort Collins, Colorado, it works to "connect people with nature through education and conser-



San Diego Botanic Garden's bamboo collection showcases the plant's beauty and utility.

vation programs, and to protect wildlife and wild lands." For more about the Be A Habitat Hero program, visit www.habhero.org.

CALIFORNIA BAMBOO COLLECTION RECEIVES NAPCC ACCREDITATION

San Diego Botanic Garden's (SDBG) extensive bamboo collection—the largest one in a North American public garden—was recently accredited by the North American Plant Collections Consortium. This accreditation designates the collection as a resource for plant identification, cultivar registration, and research.

Originating with the founding of the American Bamboo Society at the garden in 1979, the SDBG bamboo collection consists of 121 taxa. These include Asian species and cultivars as well as species from the Himalayas, South America, and Africa. In addition to highlighting bamboo's ornamental value in gardens, the collection celebrates the plant group's long history of use by humans and cultural significance. Visit www.sdbgarden.org for more details about the bamboo collection.

News written by Editorial Intern Audrey Harman with Associate Editor Viveka Neveln.

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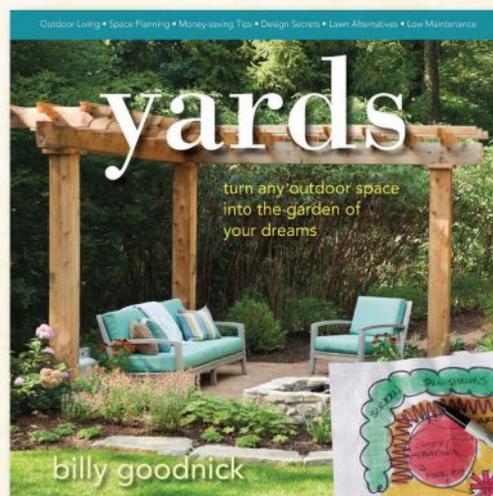
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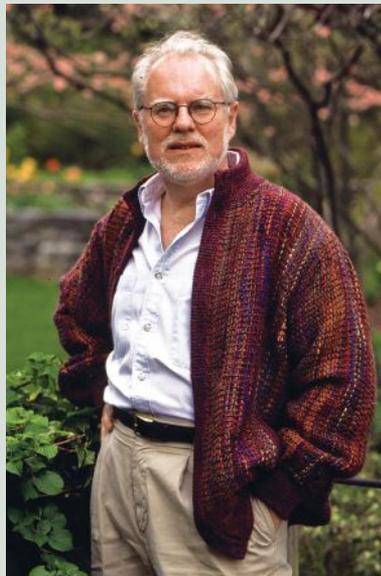
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In Memoriam: James van Sweden

by Susan Hines

The profession of landscape architecture has lost one of its best ambassadors to the public with the passing of James van Sweden, on September 30, 2013, at age 78. Together with his longtime business partner Wolfgang Oehme—who died



James van Sweden

in 2011—and their Washington, D.C.-based firm, Oehme, van Sweden & Associates (OvS), he has done more to transform the American landscape than anyone since the great park designer Frederick Law Olmsted established his firm a century before.

Now widely accepted and frequently imitated, meadowlike profusions of perennials and ornamental grasses were revolutionary when first introduced by OvS in the 1970s. Van Sweden's

tireless advocacy on behalf of the firm's signature style—which became known as the New American Garden—enticed a public and a profession accustomed to the traditional aesthetic of staid lawn and evergreen foundation plantings to return to the garden.

Van Sweden popularized this approach through numerous articles and books, including *Bold Romantic Gardens*, *Gardening with Water*, and *Architecture in the Garden*. He delivered lectures to garden clubs large and small. Guided tours of his own gardens and those of clients kept him running from spring until fall. When he was a guest on NPR's Diane Rehm show, his fans lit up the phone lines. Unlike many landscape "starchitects," he was extraordinarily accessible.

More than any richly illustrated book or magazine spread, OvS's many public commissions, especially those in the nation's capital, demonstrated that these naturalistic plantings could be appropriately applied at every scale. At the Virginia Avenue gardens of the Federal Reserve, at the German American Friendship garden, and elsewhere in Washington, D.C., millions of tourists and government workers saw firsthand the beauty of the New American Garden style.

While Olmsted's firm and OvS worked on different scales, Olmsted and van Sweden share key similarities. For example, like van Sweden, Olmsted had an evangelical zeal for his work and he too used lectures, frequently reprinted

in newspapers, to proselytize for parks and build his firm's commissions. Would Olmsted have admired the New American Garden style? Unlikely; he would have considered it too colorful—too natural—for any public application. Olmsted foresaw an increasingly urbanized future, but he couldn't predict how starved for color, motion, and seasonal change people fed on lawns and boxwoods would become.

The widespread impact of OvS on the American landscape crystallized for me in 2002, when I interviewed Warren Klink for *Landscape Architecture* magazine. Klink and his small firm, Urthworks, were transforming Hamilton, Ohio. Local banks, libraries, small city parks, even a McDonald's, fea-



Evening Island at the Chicago Botanic Garden is among many public landscapes designed by Oehme, van Sweden & Associates.

tured abundant perennials, grasses, and flowering shrubs. Asked what inspired his design style, Klink credited van Sweden's book, *Bold Romantic Gardens*.

Trained as an architect and urban planner, van Sweden recognized our innate need for natural beauty. He persisted through the initial shockwaves and retrained the public eye. The countless public landscapes that subsequently adopted the New American Garden style, such as Klink's humble McDonald's, are a testament to both van Sweden's advocacy and the enduring quality of OvS's work. "I learned early on," he frequently said, "that imitation is the sincerest form of flattery." ∞

A former staff writer for Landscape Architecture magazine, Susan Hines lives in the Washington, D.C., area.

GREEN GARAGE®

Contributing editor Rita Pelczar reports on products she has found useful or innovative in her garden, with an emphasis on earth-friendly products and supplies. Here she focuses on products for helping avian garden visitors in winter.

Feeding Birds in Your Winter Garden

Colder weather finds me spending more time viewing my gardens from the comfort of an indoor easy chair. A wide variety of birds add lots of color and amusing activity to the late fall and winter landscape. I encourage visitation with several feeders in different styles, stocked with the seeds and suet they enjoy. I also make sure there's water for them to drink.

What makes a good bird feeder? Beyond holding a decent supply of food that is accessible to birds, it should be durable and easy to fill. And if it's attractive, it doubles as garden art. One feeder that fills that particular bill is the **Acorn All-Bird Café**. Constructed of all-weather fiber-reinforced cement, it's a feeder *and* garden sculpture in one. The soft green acorn-shaped reservoir holds a generous nine quarts of seed, and the brown acorn cap lifts off for filling. Stainless steel wire mesh, attached on the inside of the reservoir, keeps the seed from spilling out of the openings, but visiting birds have no



problem accessing the seed as they sit on the nine-inch-wide feeder tray. This feeder weighs about 17 pounds, so it needs to be mounted on a sturdy pole, such as the **Weather Resistant Steel Birdhouse Pole**. Both feeder and pole are available from Plow and Hearth (www.plowhearth.com).

The **Moon Birdfeeder** adds a splash of sparkling color to the winter landscape while catering to the smaller birds who often seem to be intimidated by larger birds at heftier feeders. Finches, chickadees, and nuthatches perch on the edge or hop right into the feeder for a meal. Made of thick recycled crackle glass, it comes in blue, purple, and gold. I have a blue one placed in a bed outside my dining room windows, where a lot



of avian action takes place. Although the feeder holds only two cups of seed, it's easy to refill, and drainage holes prevent the seed from getting soggy. Available from Gardeners Supply Company (www.gardeners.com).

Since I have many feeders to fill, I appreciate the innovative simplicity of the **Funneling Bird Seed Scoop**, which allows me to fill most of my feeders without having to remove them from their stand or hanger. Made of UV-stable plastic, the large end holds almost a pint-and-a-half of seed. The smaller end serves both as a handle and a one-inch funnel. Simply insert the small end into your feeder, slide the latch to open the funnel, and the seed pours into your feeder through the handle.



Available from Lee Valley Garden Tools (www.leevalley.com).

Store your seed in style with a **Bird Feed Tin** from Gardener's Edge (www.gardenersedge.com). The cheerful blue powder-coated steel container holds five pounds of seeds. It has a tight-fitting lid and side and top handles and includes a small aluminum scoop.



Provide birds with water all winter with the **E-Z Tilt-To-Clean Heated Birdbath**—also from Gardener's Edge—which has been tested to temperatures as low as 20 degrees below zero Fahrenheit. The 20-inch-diameter poly tub mounts with a U-bracket on a deck or porch railing and tilts for easy cleaning. The 14-inch electric cord may require an extension, but once plugged in, birds will have a source of fresh water all winter. In summer, the cord tucks into the base.



A contributing editor for The American Gardener, Rita Pelczar lives in North Carolina.

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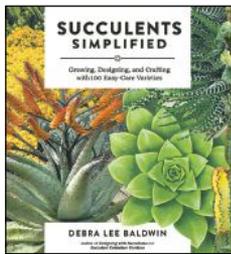
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Recommendations for Your Gardening Library

Succulents Simplified

Debra Lee Baldwin. Timber Press, Portland, Oregon, 2013. 272 pages. Publisher's price, softcover: \$24.95.

SUCCULENTS SIMPLIFIED is Debra Lee Baldwin's third book about these fleshy "plants that drink responsibly," as she calls them. While I wholeheartedly recommend her first two books, *Succulent Container Gardens* and *Designing with Succulents*, this new book is by far my favorite for a number of reasons.



The first section provides all the guidance you need for keeping your succulents healthy and happy, both in containers and in landscapes. Baldwin

covers topics such as water, light exposure, and other requirements for successfully growing various succulents. She addresses common misconceptions when it comes to care, especially watering (she stresses that they are "low-water, not no-water, plants"). She wraps up with brief discussions of propagation techniques and design considerations.

The second section of the book gives step-by-step instructions for making beautiful projects with succulents. Baldwin provides a wide variety of projects, ranked from easy to advanced, for readers to choose from. Whether or not you've worked with succulents before, you're likely to find plenty of insights and creative ideas for crafts that show off these plants. For example, you can try your hand at making a simple dish garden or a complex bouquet featuring a mix of different succulents.

The final section lists 100 succulents that are relatively easy to find in the trade and care for. The plants are listed in alphabetical order by genus and there is at least one photograph and short description of each one. You'll also find hardiness ranges, what colors the plants will turn when stressed, and lots of other useful tidbits that will help you get to know your plants better.

Throughout the book, instructive photos—most of which are Baldwin's—help clarify the concepts she discusses. Numerous information-packed sidebars supplement the main text, too. One I particularly appreciate is, "What's wrong with your succulent?," which lists common problems and how to remedy them.

Overall, *Succulents Simplified* will appeal to those just discovering the amazing world of succulents and longtime enthusiasts alike. It is down-to-earth, fun to read, and really does simplify succulents for everyone!

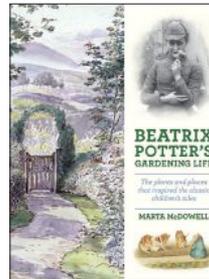
—Cassidy Tuttle

Cassidy Tuttle is a Utah-based photographer and succulent plant enthusiast. Find her at www.succulentsandsunshine.com.

Beatrix Potter's Gardening Life

Marta McDowell. Timber Press, Portland, Oregon, 2013. 339 pages. Publisher's price, hardcover: \$24.95.

ALMOST EVERYONE knows *The Tale of Peter Rabbit*, the children's book about a mischievous bunny who sneaks into a vegetable patch and hides from the angry gardener, Mr. McGregor. First published in 1902, it's arguably one of the most popular books of all time, but few know the story of its author and illustrator, Beatrix Potter.



Marta McDowell brings to light a delightfully different side of the celebrated author. With formidable self will and an independent spirit, Beatrix Potter chose the lifestyle she wanted, far from fashionable

Victorian London, where she was born. She purchased her 34-acre Hill Top farm in England's Lake District as an unmarried woman, and transformed it with an orchard, vegetable garden, and perennial beds she designed herself. An author, artist, landscape designer, naturalist, and preservationist, she was a woman ahead of her time.

The first part of the book recounts Potter's life through a gardening lens and is copiously illustrated with her sketches and watercolors of plants. The second part is a guide to her gardens at Hill Top through the different seasons of the year, supplemented with period and contemporary photographs as well as Potter's artwork.

A casual gardener, Potter delighted in peonies, 'Queen of Bourbons' shrub roses, witch hazels, and blue gentians; zonal geraniums in clay pots lined her windowsills; and she appreciated hardy plants that livened up the winter scenery, especially snowdrops and winter jasmine. She also was thrifty, growing many plants from cuttings and divisions, and from seed she saved each year.

Hill Top is now part of the United Kingdom's National Trust, which protects and maintains historic sites. Hordes of Beatrix Potter fans make the pilgrimage to see it, and her gardens there still offer a glimpse of the plants that inspired her. The last section of the book is a helpful guide to visiting the gardens and other nearby properties she helped to conserve. An interesting list of plants that grew in her gardens (compiled from her letters and other sources), and another list of plants that appear in her published stories round out the book.

—Charlotte Albers

Charlotte Albers is a landscaper and garden writer who lives in Shelburne, Vermont. She writes about gardening in the Northeast at www.houzz.com.

A vertical arrangement of orchids on the left side of the page. The top half features several pink orchids with speckled centers, and the bottom half features a yellow orchid with a white center. The entire page is framed by a dark purple border.

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The Botanical Gardens at Springs Preserve

by Audrey Harman

IN THE HEART of Las Vegas, Nevada, lies Springs Preserve, a natural gem comprising 180 acres of protected land. As its name implies, the site was at one time a vital water source for Native Americans and early settlers. Today, the Preserve—located about three miles west of the Las Vegas strip—provides a “welcome respite to tourists and nature enthusiasts from all over the world,” says Tracy Omar, science and gardens supervisor.

DESERT GARDENING

Promoting water conservation and sustainability is an important theme at Springs Preserve, given that the area, located in the Mojave Desert, averages three inches of rain per year and experiences temperatures as high as 117 degrees Fahrenheit. “A large portion of water use in Las Vegas is on landscapes,” says Omar, “so the gardens showcase drought-toler-



Cactus Alley, one of Springs Preserve's display gardens, features both native and exotic species.

ant landscape design to encourage people to remove lawns and replace them with more appropriate landscaping.”

The Preserve is home to the largest collection of Mojave Desert plants at any public garden. “We also feature plants from hot, arid areas throughout the rest of the world,” says Omar.

Plantings, both natural and designed, are located throughout the Preserve, including on 110 acres of natural habitat accessed by trails and in an eight-acre botanical garden. In the display garden, visitors can stroll through Cactus Alley, relax in the Palm Oasis, and tour the herb and vegetable garden. The last “shows the wide array of produce that can be grown in Las Vegas by using regionally appropriate gardening methods,” says Omar.

Much of the native plant collection came about serendipitously. When Springs Preserve was being developed between 2000 and 2007, Las Vegas was in a development boom that involved clearing thousands of acres of land. “Rather than let native plants be destroyed,” says Omar, “we partnered

with local real estate developers, the Nevada Division of Forestry, and the Bureau of Land Management to get permits to access sites ahead of bulldozers and salvage plants for the landscape at the Preserve.”

PLANNING YOUR VISIT

There is something to see year round, but Omar says the best time to experience the gardens is between February and April. The Preserve also offers exhibits and educational programs focused on Native American history, ranching, the railroad era, mining, and nuclear testing, as well as the city's more notorious past.

The glitzy side of Las Vegas clearly has its appeal for most visitors, but the Preserve offers a refreshing change of pace as one of the few outdoor spaces in the city dedicated to enjoying nature. “Guests move slower here than in the bustling downtown environment,” notes Omar, “literally taking time to smell the roses.”

Audrey Harman is an editorial intern with The American Gardener.

Additional Information

Springs Preserve, 333 S. Valley View Blvd., Las Vegas, NV 89107. (702) 822-7700. www.springspreserve.org.

- Open daily from 10 a.m. to 6 p.m. Closed on Thanksgiving Day and Christmas Day.

- Admission: Adults \$18.95, children (ages 5 to 17) \$10.95 (under 4 free), students with I.D. and seniors \$17.05. Springs Preserve participates in the AHS's Reciprocal Admissions Program, so AHS members receive free admission as well as discounts in the gift shop and cafe.

Other nearby sites to explore:

Las Vegas Natural History Museum, (702) 384-3466. www.lvnhm.org.

Red Rock Canyon National Conservation Area, (775) 861-6500. www.blm.gov.



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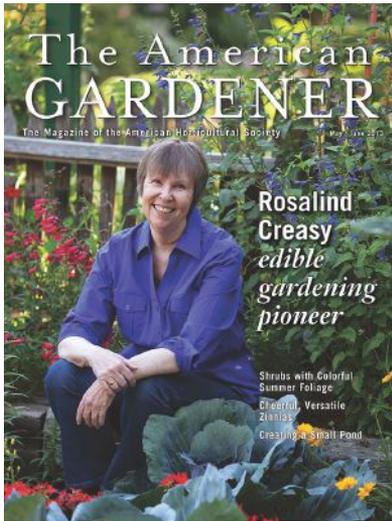
For more information about the AHS Travel Study Program,
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or contact Joanne Sawczuk at jsawczuk@ahs.org; (703) 768-5700 ext. 132.

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GIFTS FOR THE GARDENER

*Need some ideas for plant- or garden-themed gifts?
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This handcrafted stoneware piece adds a decorative element to any garden, while attracting butterflies. Simply place a little sand and water in the glass well, then enjoy the winged wonders that stop by for a drink. \$49.95. (800) 669-9696. www.signals.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. 23–JAN. 1. **Christmas at Newport Mansions.** Tours. Green Animals Topiary Garden. Portsmouth, Rhode Island. (401) 683-1267. www.newportmansions.org.

RAP NOV. 29–DEC. 26. **Christmas at Blithewold.** Tours, display. Blithewold Mansion, Gardens and Arboretum. Bristol, Rhode Island. (401) 253-2707. www.blithewold.org.

RAP NOV. 29–DEC. 29. **Poinsettia Show.** Buffalo and Erie County Botanical Gardens. Buffalo, New York. (716) 827-1584. www.buffalogardens.com.

RAP NOV. 30. **Decorating with Native Greenery.** Workshop. Landis Arboretum. Esperance, New York. (518) 875-6935. www.landisarboretum.org.

RAP DEC. 21. **Plants of the Winter Solstice.** Class. Cornell Plantations. Ithaca, New York. (607) 255-2400. www.cornellplantations.org.

MID-ATLANTIC

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

RAP NOV. 22–27. **Million Bulb Walk.** Norfolk Botanical Garden. Norfolk, Virginia. (757) 441-5830. www.norfolkbotanicalgarden.org.

RAP NOV. 23. **Thanksgiving Centerpiece Workshop.** Adkins Arboretum. Ridgely, Maryland. (410) 634-2847. www.adkinsarboretum.org.

RAP NOV. 23–JAN. 5. **Yuletide at Winterthur.** Tours. Winterthur Museum, Garden & Library. Winterthur, Delaware. (302) 888-4600. www.winterthur.org.

NOV. 23–JAN. 6. **Garden of Lights.** Display. Brookside Gardens. Wheaton, Maryland. (301) 962-1400. www.montgomeryparks.org/brookside.

RAP NOV. 29–JAN. 13. **Dominion GardenFest of Lights.** Display. Lewis Ginter Botanical Garden. Richmond, Virginia. (804) 262-9887. www.lewisginter.org.

Looking ahead

JAN. 9 & 10. **Mid-Atlantic Nursery Trade Show 2014.** Baltimore Convention Center. Baltimore, Maryland. (800) 431-0066. www.mants.com.

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.

SOUTHEAST

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

RAP NOV. 15–DEC. 31. **Galaxy of Lights.** Display. Huntsville Botanical Garden. Huntsville, Alabama. (256) 830-4447. www.hsvbg.org.

RAP NOV. 22–DEC. 31. **Holiday at the Garden.** Display. Daniel Stowe Botanical Garden. Belmont, North Carolina. (704) 825-4490. www.dsbgo.org.

RAP NOV. 23 & 24. **Edison Garden Market.** Plant sale. Edison & Ford Winter Estates. Fort Myers, Florida. (239) 334-7419. www.edisonfordwinterestates.org.

RAP NOV. 29–DEC. 21. **Enchanted Airlie.** Light display. Airlie Gardens. Wilmington, North Carolina. (910) 798-7700. www.airliegarden.com.

NOV. 29–DEC. 31. **Magic Christmas in Lights.** Bellingrath Gardens and Home. Theodore, Alabama. (251) 973-2217. www.bellingrath.org.

RAP NOV. 29–JAN. 5. **Poinsettia Display.** Bok Tower Gardens. Lake Wales, Florida. (863) 676-1408. www.boktowergardens.org.

RAP DEC. 6–22. **Garden of Lights.** Display. Flamingo Gardens. Davie, Florida. (954) 473-2955. www.flamingogardens.org.

RAP DEC. 7. **Winter Holiday Topiary or Table Wreath.** Class. Sarah P. Duke Gardens–Duke University. Durham, North Carolina. (919) 684-3698. www.gardens.duke.edu.

JAN. 24–26. **Southern Gardening Symposium.** Callaway Gardens, Pine Mountain Georgia. (706) 663-5153. www.callawaygardens.com.

RAP JAN. 28–30. **The Pleasure Garden.** Symposium. Atlanta Botanical Garden. Atlanta, Georgia. (404) 876-5859. www.atlantabotanicalgarden.org.

NORTH CENTRAL

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

RAP NOV. 26–JAN. 5. **Christmas & Holiday Traditions Around the World.** Exhibit. Frederik Meijer Gardens & Sculpture Park. Grand Rapids, Michigan. (888) 957-1580. www.meijergardens.org.

RAP NOV. 29–DEC. 31. **Conservatory Crossing.** Display. Garfield Conservatory & Sunken Gardens. Indianapolis, Indiana. (317) 327-7183. www.garfieldgardensconservatory.org.

RAP NOV. 29–JAN. 5. **Wonderland Express.** Display. Chicago Botanic Garden. Glencoe, Illinois. (847) 835-5440. www.chicagobotanic.org.

RAP NOV. 30–JAN. 5. **50 Shades of Green.** Lecture. The University of Michigan Matthaei Botanical Gardens and Nichols Arboretum. Ann Arbor, Michigan. (734) 647-7600. www.mbgna.umich.edu.

RAP DEC. 1–30. **Deck the Hall.** Light show. Stan Hywet Hall & Gardens. Akron, Ohio. (330) 836-5533. www.stanhywet.org.

RAP DEC. 13–29. **Holiday Light Show.** Rotary Botanical Gardens. Janesville, Wisconsin. (608) 752-3885. www.rotarybotanicalgardens.org.

JAN. 10–12. **Indiana Home & Garden Show.** Indianapolis Convention Center. Indianapolis, Indiana. www.homeshowcenter.com.

SOUTH CENTRAL

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

RAP NOV. 11–DEC. 31. **Holiday Lights.** Display. Garvan Woodland Gardens. Hot Springs, Arkansas. (501) 262-9300. www.garvangardens.org.

RAP NOV. 23–JAN. 5. **Wreath Auction.** Exhibit and silent auction. Missouri Botanical Garden. St. Louis, Missouri. (314) 577-5100. www.mobot.org.

JAN. 5 & 6. **Western Trade Show & Education.** Western Nursery & Landscape Association. Overland Park, Kansas. (888) 233-1876. www.nationalgreencentre.org.

JAN. 10–14. **Horticulture Industries Show.** Tulsa Community College. (479) 494-3760. www.hortla.okstate.edu/his.htm.

JAN. 14–16. **Austin Home & Garden Show.** Austin Convention Center. Austin, Texas. (210) 408-0998. www.austinhomelandgardenshow.com.

SOUTHWEST

AZ, CO, NM, UT

RAP NOV. 29–DEC. 31. **Las Noches de las Luminarias.** Display. Desert Botanical Garden. Phoenix, Arizona. (480) 941-1225. www.dbg.org.

RAP NOV. 29–JAN. 1. **Blossoms of Light.** Display. Denver Botanic Gardens. Denver, Colorado. (720) 865-3500. www.botanicgardens.org.

NOV. 30–DEC. 30. **River of Lights.** Display. ABQ BioPark Botanic Garden. Albuquerque, New Mexico. (505) 848-7182. www.cabq.gov/biopark.

RAP DEC. 6–31. **Garden of Lights.** Display. The Gardens on Spring Creek. Fort Collins, Colorado. (970) 416-2486. www.fcgov.com/gardens.

JAN. 15–17. **Arizona Home & Garden Show.** Phoenix Convention Center. Phoenix, Arizona. (210) 408-0998. www.arizonahomeshows.com.

JAN. 15–17. **Maricopa County Home & Garden Show.** Arizona State Fairgrounds. Phoenix, Arizona. (602) 485-1691. www.maricopacountyhomeshows.com.

WEST COAST

CA, HI, NV

RAP DEC. 7–30. **Garden of Lights.** Display. San Diego Botanic Garden. Encinitas, California. (760) 436-3036. www.sdbgarden.org.

RAP DEC. 14. **Organic Fruit and Vegetable Gardening.** Class. Los Angeles County Arboretum & Botanic Garden. Arcadia, California. (626) 821-3222. www.arboretum.org.

DEC. 21. **Medicinal Plants.** Tour. Foster Botanical Garden. Honolulu, Hawaii. (808) 522-7066. www1.honolulu.gov/parks/hbg.

NORTHWEST

AK, ID, MT, OR, WA, WY

NOV. 28–JAN. 5. **Winter Garden aGlow.** Idaho Botanical Garden. Boise, Idaho. (208) 343-8649. www.idahobotanicalgarden.org.

RAP NOV. 29–DEC. 22. **Christmas in the Garden.** Light display. Oregon Garden. Silverton, Oregon. (503) 874-8100. www.oregongarden.org.

Interactive Light Display at Morton Arboretum

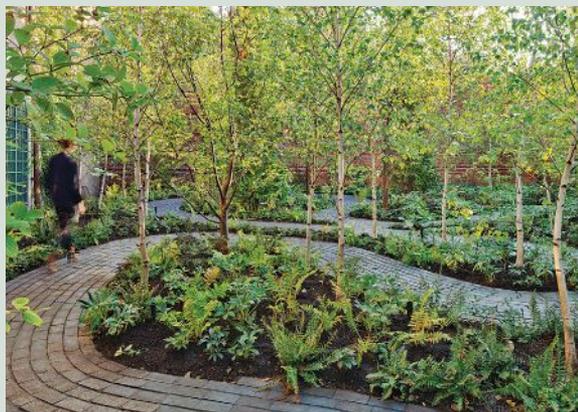
FROM NOVEMBER 22 through January 4, the Morton Arboretum in Lisle, Illinois, will offer a “holiday experience far beyond traditional twinkling lights,” says Sue Wagner, Morton’s vice president of education and information. “Illumination: Tree Lights at the Morton Arboretum” will use cutting-edge technology to not only illuminate its trees, but make them virtually come to life with interactive elements. For example, trees will glow brighter with a hug and change colors with a song or a wave of the hand. Visitors can even project an image of their own face onto the trees, 30 feet up. To further enhance the experience, warming fires, make-your-own s’mores, and additional activities will be offered.

The Morton Arboretum participates in the American Horticultural Society’s Reciprocal Admissions Program; visitors showing a current AHS membership card receive free admission and parking. Tickets for “Illumination” are not included. To plan your visit, go to www.mortonarb.org.

Redesigned Garden Opens at Gardner Museum

THE ISABELLA STEWART GARDNER Museum in Boston, Massachusetts, debuted its redesigned Monks Garden in September. This 7,500-square-foot space has been part of the museum’s campus since it opened in 1903, but has undergone many changes since then. Gardner, an avid art collector, originally created it as a contemplative space in an Italianate style. The latest design by landscape architect Michael Van Valkenburgh preserves the contemplative atmosphere while giving the garden a much more informal, woodland feel.

Serpentine paths wind through the garden, encouraging visitors to meander thoughtfully rather than taking quick, direct routes. Planted in the spaces created by the paths are small groves of trees with interesting bark—such as paperbark maples and Stewartias—and a tapestry of perennials with contrasting textures that invite further inspection and provide multi-season appeal. To learn more about the Monks Garden, visit www.gardnermuseum.org.



Serpentine brick paths invite visitors to take a contemplative journey through the newly redesigned Monks Garden.

—Audrey Harman, Editorial Intern

RAP NOV. 30–JAN. 4. **Garden d’Lights.** Bellevue Botanical Garden. Bellevue, Washington. (425) 452-6844. www.bellevuebotanical.org.

RAP DEC. 20 & 21. **Solstice Stroll.** Kruckeberg Botanic Garden and MsK Rare & Native Plant Nursery. Shoreline, Washington. (206) 546-1281. www.kruckeberg.org.

JAN. 27–31. **Tacoma Home & Garden Show.** Tacoma Dome. Tacoma, Washington. (253) 756-2121. www.otshows.com.

CANADA

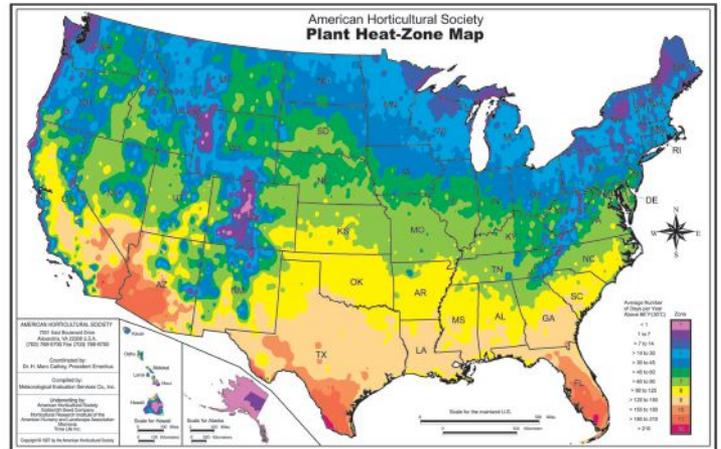
RAP DEC. 8. **Jack Frost Holiday.** Display and tours. Muttart Conservatory. Edmonton, Alberta. (780) 496-8737. www.muttartconservatory.ca.

DEC. 11–JAN. 4. **Festival of Lights.** Display. VanDusen Botanic Garden. Vancouver, British Columbia. (604) 257-8335. www.vandusengarden.org.

PRONUNCIATIONS AND PLANTING ZONES

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



A-L

- Abeliophyllum distichum** uh-beel-ee-o-FIL-um DIS-tih-kum
(USDA Hardiness Zones 5–8, AHS Heat Zones 8–5)
- Agave parryi var. truncata** uh-GAH-vee PAIR-ee-eye var. trun-KAY-tuh
(7–10, 11–4)
- Aloe arborescens** AL-o ar-bo-RES-enz (9–11, 11–9)
- Andropogon virginicus** an-dro-PO-gon vir-JIN-ih-kus (2–7, 7–1)
- Astilbe chinensis** uh-STIL-bee chy-NEN-sis (4–8, 8–2)
- Athyrium niponicum** uh-THIH-ree-um nih-PON-ih-kum (5–8, 8–1)
- Berberis thunbergii var. atropurpurea** BUR-bur-iss thun-BUR-jee-eye var.
at-ro-pur-PUR-ee-uh (4–8, 8–4)
- Calylophus hartwegii** kal-ih-LO-fus hart-WEG-ee-eye (5–8, 8–5)
- Chaenomeles speciosa** kee-NOM-uh-leez spee-see-O-suh (5–9, 9–1)
- Chimonanthus praecox** kim-o-NAN-thus PREE-cox (7–9, 9–6)
- Chionodoxa luciliae** ky-on-o-DOK-suh loo-SIL-ee-ee (3–9, 9–1)
- Cornus alba** KOR-nus AL-buh (2–8, 8–1)
- C. sericea** C. seh-RISS-ee-uh (2–8, 8–1)
- Corylus avellana** KOR-ih-lus ah-vel-LAN-uh (4–8, 9–1)
- Crocus tommasinianus** KRO-kus tom-muh-sin-ee-AY-nus (3–8, 8–1)
- Daphne odora** DAF-nee o-DOR-uh (7–9, 9–7)
- Datura wrightii** duh-TOOR-uh RIGHT-ee-eye (8–11, 12–1)
- Edgeworthia chrysantha** edj-WORTH-ee-dih krih-SAN-thuh (7–9, 9–6)
- Epimedium grandiflorum var. higoense** ep-ih-ME-dee-um
gran-dih-FLOR-um var. hih-go-EN-see (5–8, 8–5)
- Eutrochium purpureum** yoo-TROK-ee-um pur-PUR-ee-um (3–8, 9–1)
- Hakonechloa macra** ha-kon-eh-KLO-uh MAK-ruh (5–9, 9–2)
- Hamamelis × intermedia** ham-uh-ME-liss in-ter-MEE-dee-uh (5–9, 9–1)
- H. mollis** H. MOL-lis (5–9, 9–2)
- Helleborus foetidus** hel-eh-BOR-us FEE-tih-dus (5–8, 8–6)
- H. × hybridus** H. HY-brih-dus (4–8, 8–3)
- H. odoratus** H. o-DOR-us (5–9, 9–3)
- Iberis sempervirens** eye-BEER-iss sem-pur-VY-renz (3–8, 8–1)
- Ilex verticillata** EYE-leks vur-tih-sih-LAY-tuh (3–9, 9–1)
- Jasminum nudiflorum** jaz-MIN-um new-dih-FLOR-um (6–9, 9–6)
- Ligularia dentata** lig-yew-LAIR-ee-uh den-TAY-tuh (4–8, 8–1)
- Lonicera standishii** lah-NISS-er-uh stan-DISH-ee-eye (5–8, 8–3)

M-Z

- Macleaya cordata** muh-KLAY-uh kor-DAY-tuh (3–8, 8–3)
- Maclura pomifera** muh-KLUR-uh pom-IF-ur-uh (5–9, 9–5)
- Mahonia aquifolium** muh-HO-nee-uh ah-kwi-FO-lee-um (6–9, 9–6)
- Oenothera caespitosa** ee-NOTH-ur-uh sez-pih-TOH-suh (4–8, 8–1)
- Opuntia engelmannii** o-PUN-shuh en-gul-MAN-ee-eye (6–9, 10–7)
- Osmanthus heterophyllus** oz-MAN-thuss het-ur-ah-FIL-lus (7–9, 9–7)
- Phlox subulata** FLOKS sub-yew-LAY-tuh (3–8, 8–1)
- Podocarpus macrophyllus** poh-doh-KAR-pus mak-ro-FIL-lus (8–10, 10–7)
- Poncirus trifoliata** pon-SEER-us try-fo-lee-AY-tuh (5–9, 9–5)
- Puschkinia scilloides** push-KIN-ee-uh sil-OY-deez (3–9, 9–1)
- Prunus mume** PREW-nus MOO-may (6–9, 8–6)
- Pyracantha coccinea** py-ruh-KAN-thuh kok-SIN-ee-uh (6–9, 9–3)
- Pyrus pyrifolia** PY-rus py-rih-FO-lee-uh (4–9, 9–3)
- Rosa rugosa** RO-zuh roo-GO-suh (2–9, 9–1)
- Rudbeckia maxima** rood-BEK-ee-uh MAKs-ih-muh (4–8, 8–1)
- Salix purpurea** SAY-liks pur-PUR-ee-uh (3–7, 7–1)
- Sarcococca hookeriana var. humilis** sar-kuh-KOKE-uh hook-ur-ee-AN-uh
var. HEW-mih-lis (6–9, 9–1)
- S. orientalis** S. aw-ree-en-TAL-iss (6–8, 8–5)
- Schizachyrium scoparium** skits-ah-KEER-ee-um sko-PAR-ee-um
(3–8, 8–1)
- Silphium perfoliatum** SIL-fee-um per-fo-lee-AY-tum (4–9, 9–4)
- Sorghastrum nutans** sor-GASS-trum NOO-tanz (4–9, 9–1)
- Sporobolus wrightii** spor-OB-o-lus RIGHT-ee-eye (5–9, 9–3)
- Taxus × media** TAK-suss MEE-dee-uh (4–7, 7–3)
- Thalictrum rochebrunianum** thal-IK-trum rowsh-broo-nee-AY-num
(3–8, 8–4)
- Thuja occidentalis** THEW-yuh ahk-sih-den-TAL-iss (2–7, 7–1)
- T. plicata** T. ply-KAY-tuh (6–8, 8–6)
- Tiarella cordifolia var. collina** tee-uh-REL-luh kor-dih-FO-lee-uh
var. ko-LEE-nuh (3–7, 7–1)
- Veronica subsessilis** vur-ON-ih-kuh sub-SESS-ih-lis (4–7, 7–1)

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—David J. Ellis, Editor



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Giant Sacaton: A Tough and Elegant Native Grass

by Scott Calhoun

I FIRST SAW giant sacaton in the wild one August on a family trek in the grasslands southeast of Tucson, Arizona. Lured by cool sycamore-lined streambeds and oak-studded hills, we drove down a lonely dirt road near the town of Patagonia, half-seriously looking for land on which to build a cabin. My wife, Deirdre, rode shotgun, while our then 12-year-old daughter Zoë sulked in the backseat—a captive on yet another trip filled with stops to look at plants and rocks.

After ample rains, the grasslands in southern Arizona had turned an almost shocking green. The valleys and rolling hills were coiffed with grama grasses (*Bouteloua* spp.), while muhlys (*Muhlenbergia* spp.) lined creek beds and hillsides. But one species of native grass stood well above the rest: the aptly-named giant sacaton (*Sporobolus wrightii*, USDA Hardiness Zones 5–9, AHS Heat Zones 9–3).

Spotting a “For Sale” sign tacked to a tree, we got out to look. The land—tree-lined on one side and abutting a wide dry streambed—was without a doubt bottomland and squarely in the floodplain. Only a fool would build here. Yet something drew us to the property, and when we looked down the entire bottomland was filled with a sea of giant sacaton.

The grasses were in full flaxen bloom, and the stalks softly brushed our faces as we walked through them. Even Zoë, the sullen pre-teen, was delighted. I snapped a photo of her, in full brace-face grin, with strands of hair and blonde sacaton flowers arching across her forehead. It remains one of my favorite portraits of her.

ADAPTABLE AND QUICK-GROWING

As a garden plant, giant sacaton has been largely ignored. I aim to change that. And I’m not alone. In his book *Native Ferns, Moss, & Grasses* (Houghton Mifflin, 2008), Bill Cullina writes that giant sacaton is “on my top 10 list of ornamental native grasses.”



Clump-forming giant sacaton is graced by feathery flower plumes in summer and fall.

Giant sacaton occurs at elevations of 2,000 to 6,000 feet in west Texas, southern Utah, Arizona, New Mexico, and southeastern California. It thrives in spots prone to occasional flooding, making it a great choice for use in rainwater harvesting basins. It also puts up with poorly drained, salty, and alkaline soils.

A quick grower, giant sacaton reaches a height of seven to eight feet and a spread of four to six feet once established, even when the clumps are chopped nearly to the ground in late winter—a practice I recommend in a garden setting to keep things looking tidy. It’s a warm-season

grass, so it goes dormant over the winter anyway.

LANDSCAPE USES

Besides the rainwater basin use I already mentioned, giant sacaton can be used as an allée, hedge, windbreak, or living screen. It is also a fine substitute for invasive exotic grasses like pampas grass (*Cortaderia* spp.). An excellent, especially vigorous selection named “Windbreaker” presents a statuesque form with handsome flowers. It looks great mixed with other drought-tolerant perennials such as white-tufted evening primrose (*Oenothera caespitosa*), sundrops (*Calylophus hartwegii*), and datura (*Datura wrightii*).

We never purchased the land near Patagonia, but I planted some giant sacaton in our Tucson garden. Even so, we sometimes visit that bottomland just to see the swath of giant sacaton, which we still think of as “ours.”

Sources

High Country Gardens, Santa Fe, NM. (800) 925-9387.
www.highcountrygardens.com.
Plant Delights Nursery, Inc, Raleigh, NC. (919) 772-4794.
www.plantdelights.com.

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