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ON THE COVER: A variety of sturdy, dependable, and eye-catching rudbeckias bloom in Pat and Eileen Mangan’s wildflower garden in Colorado. Photograph by Charles Mann
NOTES FROM RIVER FARM

JUST WHEN most of us in the eastern United States thought spring had arrived, we found ourselves propelled back into winter again. Despite the vagaries of the weather, here at the AHS’s River Farm headquarters the most significant indicator of the seasonal transition is our annual spring plant sale taking place, as always, in late April. As I write this, trucks filled with plants are arriving and being unloaded by staff members and volunteers.

It has been an active and productive spring on many fronts. In recent weeks, the AHS Board of Directors has met several times to discuss the implementation of our Master Plan for the foreseeable future. Top priorities include long-awaited improvements to our infrastructure, as well as continued development and expansion of our national education programs. We will also be adding new gardens and renovating educational space here at River Farm. Specific details about these upgrades will be shared with all our members and friends as the plans evolve. It goes without saying that we will be seeking support from the American Horticultural Society’s extended family as we undertake this exciting journey.

I had intended to use this column to focus on some other critical issues facing the AHS, including developing new revenue streams and enhancing our internship program, but as an alumnus of Virginia Tech University in Blacksburg, I feel compelled to address the unfathomable tragedy that occurred there recently.

To show the AHS’s support at this dark moment in American history, I attended the convocation service and other activities held at the university in the wake of the shootings. It was truly one of the most poignant experiences I have ever had. Virginia Tech is one of this country’s leading educational institutions and has been, since its inception, committed to the advancement of horticultural education and research as well as the development of groundbreaking new technologies that have benefited the horticulture field. A number of this country’s foremost horticultural experts have come through the Virginia Tech program.

The AHS has been a partner with Virginia Tech in the past and we have been working to further strengthen and develop that relationship. In fact, one of the amazing interns currently working here at River Farm is a recent Virginia Tech graduate. As one of the leading organizations in American horticulture, we make a point of supporting, through good times and bad, those institutions that are doing critical work in the field. The work that is taking place at Virginia Tech in the area of horticulture—along with many other educational tracks—is important to the state of Virginia, the country, and the world.

I hope you will join me in keeping the university’s faculty, students, and the families of the victims in your thoughts and prayers as they recover from this tragedy. After experiencing their spirit firsthand at the convocation, I am confident the university will emerge stronger and more unified than ever.

—Deane H. Hundley, President & CEO

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FENNEL’S INVASIVENESS
I am concerned about the photo on page 34 in the March/April issue showing the use of bronze fennel in a garden bed. The Brooklyn Botanic Garden’s Native Alternatives to Invasive Plants lists fennel as invasive in a number of states, including Virginia. Are you encouraging gardeners to use fennel through ignorance of its placement on an invasive plant list, or is the list wrong? I am in the process of removing invasive plants from my property and need the correct information.

Carol Meeske
Landrum, South Carolina

Editor’s response: Our magazine’s policy is to, whenever possible, exclude or clearly identify plants that are considered invasive in wild areas. Because there are many different invasive plant lists and many definitions of “invasive,” it is not always practical to put a caveat on every plant we cover. Fennel is known to self-sow in certain regions of the mid-Atlantic and on the West Coast, but it is not considered a pest on a par with many other invasive species. Given its redeeming qualities as a nectar source for diverse insects and as a host for butterfly larvae, we suggest gardeners in those areas grow it but remove or harvest the piquant seeds in late summer before they are dispersed.

HOLLYHOCK HELP
I greatly admired the ‘Indian Spring’ hollyhock shown on page 20 of the article about classic All-America Selections published in the March/April issue, but I can’t find a source for seeds. Can you help?

Nancy Stoddard
Chatham, Massachusetts

Editor’s response: Seeds for ‘Indian Spring’ can be purchased through the following mail-order suppliers:
Baker Creek Heirloom Seeds, Mansfield, Missouri, (471) 924-8917, www.RareSeeds.com;

CYPRESS MULCH
I was pleased to read your article in the January/February issue addressing the sustainability of harvesting cypress trees for use as mulch. Cypress is being cut for mulch not only in Louisiana but any place it grows through the Southeast. We have had some success addressing the issue here in Florida, where some municipalities and several counties have banned its use, but this is a national problem because cypress mulch is being sold throughout the United States. The answer is to educate gardeners on a national level so they will not purchase cypress mulch. I hope your article will help in this regard.

James C. Eggert
Quincy, Florida

Please write us! Address letters to Editor, The American Gardener, 7931 East Boulevard Drive, Alexandria, VA 22308. Send e-mails to editor@ahs.org (note Letter to Editor in subject line). Letters we print may be edited for length and clarity.
The American Horticultural Society’s 15th Annual

National Children & Youth Garden Garden Symposium

July 19–21, 2007 • Chaska, Minnesota

Hosted by the Minnesota Landscape Arboretum’s Public Policy Programs

For more information or to be added to the mailing list, visit www.ahs.org or call 703-768-5700 x 132.
Top Exhibits Receive AHS Award at National Flower Shows

The AHS’s prestigious Environmental Award—presented to displays that best demonstrate the relationship between horticulture and the environment at a flower show—was given to exhibits at 32 national flower shows this year.

At the Northwest Flower & Garden Show in Seattle, Washington, Le Jardin Home, Garden & Ranch Design won the award for their exhibit, “Mojito: Don’t Go Away—Get Away!” And at the Philadelphia Flower Show, Kepich & Associates took home the prize for their outdoor retreat, “Serenity,” which featured roses, tulips, daffodils, rhododendrons, and forsythias.

The winner of the Environmental Award is selected based on four criteria: exhibit design, aesthetics, plant material, and environmental stewardship. One exhibit is awarded per flower show.

Public Gardens Conference in Washington, D.C.

Public garden directors, horticulturists, and garden educators will meet in the nation’s capital June 26 to 30 for “Defining Your Garden’s Culture,” the annual conference of the American Public Gardens Association (APGA).

Hosts for the conference are the Smithsonian Institution and the U.S. Botanic Garden. The American Horticultural Society, American University, Brookside Gardens, Green Spring Gardens, Hillwood Museum & Gardens, and the U.S. National Arboretum are also conference partners.

This year’s event includes dozens of pre-conference workshops and more than 26 educational sessions that explore various public garden issues, from leadership and advocacy to ways to expand development and sustainability programs. Tours of select gardens in the surrounding metropolitan D.C. area, including a pre-symposium visit to the AHS’s River Farm headquarters, are offered throughout the symposium.

The APGA—formerly known as the American Association of Botanical Gardens and Arboreta—is the primary association for public gardens in America, serving 500 gardens nationwide. To learn more about the conference, please visit www.publicgardens.org or call the APGA headquarters at (302) 655-7100.

New AHS Board Members

Caroline Lewis, Shirley Nicolai, and Gail Smith were recently elected to the AHS Board of Directors.

Caroline Lewis is the director of education for the Center for Teaching and Learning at Fairchild Tropical Botanic Garden in Coral Gables, Florida. Lewis has also worked for four years as the director of the Upper School at Ransom Everglades School in Coconut Grove, Florida, and was a science teacher for Trinity School in New York City.

A former elementary school teacher, Shirley Nicolai serves as a board member of both the Alice Ferguson Foundation and the Friends of the National Arboretum in Washington, D.C. Additionally, Nicolai is the chair of the 2009 World Association of Flower Arrangers.

Gail Smith is a certified fund raising executive (CFRE) and former vice president of Ketchum, a fundraising firm headquartered in Dallas, Texas. Smith’s previous experience includes
serving as director of development at Carlisle School in Martinsville, Virginia, and as director of institutional advancement of the Virginia Museum of Natural History.

“All these industry leaders bring unique skill sets to our AHS team, and we look forward to working with them in the future,” says AHS President Deane Hundley.

**AHS Gains New Corporate Partner**

THE AHS welcomes Bradfield Organics as one of its newest corporate partners. With a strong emphasis on research, Bradfield Organics produces organic fertilizers for the lawn and garden.

“The AHS offers a number of great educational programs, and we thought [this partnership] would be an excellent way to inform the public on more sustainable garden practices,” explains William Sadler, vice president of marketing and business development for Bradfield Organics. “In general, people make the best decisions when they have the information they need. Today there is new information, and we at Bradfield Organics want to help people understand the new options and develop a sustainable program for their gardens.”

For more information on Bradfield Organics, visit the company’s website at www.bradfieldorganics.com.

**Youth Gardening Symposium Turns 15 in Minnesota**

JOIN EDUCATORS, community leaders, and garden designers in Chaska, Minnesota, July 19 to 21 for the AHS National Children & Youth Garden Symposium. Hosted by the Minnesota Landscape Arboretum’s Public Policy Programs, this year’s 15th annual symposium, “Widening the Circle,” will highlight fresh approaches for children’s and youth programs.

Participants will enjoy lectures by Eric Jolly, president of the Science Museum of Minnesota; Sherry Norfolk, teaching artist, storyteller, and author; and Albe Zakes, director of marketing for TerraCycle, Inc. Registration is now open for this highly anticipated event. For more information or to register, visit www.ahs.org.

**AHS Gala in September**

Mark your calendars for the AHS’s annual gala, “America’s Garden Celebration: Music in the Garden,” the evening of September 29 at River Farm in Alexandria, Virginia.

Hosted by the Friends of River Farm and the AHS Board of Directors, the gala will feature silent and live auctions that will include many unique and otherwise unavailable items. This year for the first time members will have an opportunity to bid online for auction items prior to the gala. Look for further information soon.
Mark your calendar for these national events that are sponsored or cosponsored by the AHS. Visit www.ahs.org or call (703) 768-5700 for more information.

- **APRIL 5–JUNE 3.** Epcot International Flower & Garden Festival. Lake Buena Vista, Florida.
- **JULY 19–21.** National Children & Youth Garden Symposium. Chaska, Minnesota. Hosted by the Minnesota Landscape Arboretum’s Public Policy Programs.
- **SEPT. 25.** “Bulbs That Work” AHS Online Seminar hosted by Allan Armitage.

The month of April is designated Washington Blooms! at River Farm—a salute to the beauty of springtime in and around our nation’s capital. The gardens at River Farm awaken with thousands of colorful tulips, daffodils, and blooming shrubs.

**Board Member Receives National Recognition**

In early May, AHS Board member Arabella Dane was awarded the Garden Club of America (GCA) Katharine Thomas Cary Memorial Award. This award is given in recognition of an individual who has significantly contributed to the field of floral arrangement education.

Dane, who lives in Center Harbor, New Hampshire, is immediate past chair of the AHS Board. A long serving GCA member, she is the founder of the organization’s Flower Arranging Study Group and has worked as a GCA flower arrangement and horticulture judge. She has won numerous awards for her own flower show entries, and in 1996 she received the AHS’s Frances Jones Poetker award for her achievements in floral arranging.

Dane has also served on the board of trustees for the Massachusetts Horticultural Society and is a board member of the Helen C. Frick Art and Historical Center in Pittsburgh.

“Arabella’s vision has taken the GCA to great heights and has assured participation in the global league. Her enthusiasm and her zest for life made Arabella the perfect recipient for this award,” says Alice Mathews, president of the Garden Club of America.
First AHS Online Seminar Draws a Crowd

WITH 250 MEMBERS enrolled to participate, the AHS launched “Perennials That Work,” its first online seminar, or webinar, on March 29. Over the course of an hour, University of Georgia horticulture professor and garden author Allan Armitage shared his experiences with a handful of species and cultivars from each of several genera of herbaceous perennials such as Echinacea and Epimedium. He also responded to questions from the audience connecting from 41 different states and one Canadian province.

“Dr. Armitage was very good and made an effort to discuss various zones and to include perennials that were adaptable to many sites,” says Noreen Gaetjens, an AHS member from Barrington, New Hampshire.

This event was the first in a series of three webinars, developed as a new benefit for AHS members. Next up is “Annuals That Work” on May 10, followed by “Bulbs That Work” on September 25, both of which will also be hosted by Armitage. Visit www.ahs.org for more information.

During “Perennials That Work,” Allan Armitage answered dozens of questions from participants. Here he responds to a few of the questions he was not able to address during the webinar.

What coreopsis is most resistant to powdery mildew?

Melissa Keeney Rolla, Missouri
Threadleaf coreopsis (Coreopsis verticillata) is the best. Stay away from the common coreopsis (C. grandiflora) and its cultivars.

What do you recommend to control leaf miners on columbines?

Zann Wilson Valparaiso, Indiana
Cut back and discard the diseased foliage after flowering; the new foliage that emerges will remain relatively clean. Some of the columbine species appear less susceptible to leaf miners than the hybrids.

My Nepeta ‘Walker’s Low’ has grown almost three feet tall. Are you finding ‘Walker’s Low’ not staying very low?

Carol Seaman Lincoln, Rhode Island
‘Walker’s Low’ is known to grow up to three feet tall, especially when it is grown in fertile soil. The cultivar name is somewhat misleading; it is named after a garden in the United Kingdom where it was discovered, not because the plant is low growing.

Should I cut back the dead foliage from my hellebores now?

Paul Cavazzoni Reading, Massachusetts
I cut the previous year’s foliage on my hellebores back in late winter to make the emerging flowers more visible and the plant more attractive. However, the plant will not be damaged or decline if the old leaves are not removed.
THE AHS AND MIRA BOOKS are pleased to announce that Svetlana Grobman from Columbia, Missouri, is the grand prize winner of the 2006 Susannah’s Garden Essay Contest. Inspired by the release of Susannah’s Garden by Debbie Macomber last summer, the challenge was to describe, in 100 words or less, how a garden played a role in bringing a family together.

In her winning essay on the right, Grobman evocatively recounts how her garden—in particular, her lilac bush—serves as both a reminder of her grandfather’s garden in Moscow and a marker of the growth of her grandson. “Gardening, to me, is a continuation of myself,” says Grobman. “It is a setting in which I can evaluate my life and think about people who are gone and alive.”

As the grand prize recipient, Grobman will receive an all-expenses-paid, four-day trip to Alexandria, Virginia, where she and her husband and two friends will enjoy guided tours of the AHS headquarters at River Farm and Mount Vernon Estate & Gardens, the historic home of George Washington. “This is a great opportunity to visit some of the places I’ve been reading and hearing about for years,” says Grobman.

She will also receive a one-year AHS membership, a copy of Susannah’s Garden autographed by Debbie Macomber, and a set of flower seeds and garden gloves.

Other winning entries include first-place winner Vicky McCoy, from Middletown, Delaware, followed by Susan Craig, from Mechanicsville, Virginia, and Yvonne White, from Granite City, Illinois. To read essays by all four finalists, see the online version of this issue at www.ahs.org.

News written by Editorial Intern Courtney Capstack.
Protecting One of Your Most Valuable Assets

Soil is the Key
When working with landscape trees and shrubs, the most important component of health is the soil. It is estimated that 80% of the problems related to landscape plantings originate with soil issues. That includes pest problems! Because the condition of the soil is so important for your landscape trees and shrubs, The Care of Trees places a major focus on Plant Health Care activities that affect the soil.

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

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

T MAY HAVE a growing reputation
around the world, but OXO Interna-
tional goes to great lengths to ensure
its employees—625 worldwide—retain
the feeling of a close-knit family. And it is
that same familial atmosphere that has
helped to contribute to the high quality of
its rapidly growing product line.

TOOLS FOR A VARIETY OF HANDS
Now launching at least 50 new
products on the market annual-
ly, OXO has come a long way
from the 15 kitchen tools it first
introduced to the American
market nearly two decades ago.
Its products—more than 500 in
all—range from kitchen items
to bath accessories, hardware,
and—more recently—an ever-
expanding line of garden tools.

“We have noticed that peo-
ple often combine a passion
for cooking with gardening,”
says OXO Product Manager
Michael Delevante, “and we felt it would
be great to make a product statement
across the entire field.”

OXO originated in 1990 when Sam
Faber, the founder of a popular house-
wares company, noticed that his wife was
having difficulty gripping her kitchen
tools because of slight arthritis in her
hands. To solve this common dilemma,
each OXO product is developed with the
Universal Design concept—designing
eronomic, easy to use tools for the
broadest spectrum of consumer needs.

OXO’s gardening tools also stand
alone with their “Signature Grips,” a fea-
ture on each tool “that allows the gar-
dener to maintain a firm grip on the tool,
even when the hands or the tool is wet,”
says Delevante.

COMMUNITY-BUILDING FOR EDUCATION
When it came to forming a partnership,
both OXO and the AHS saw the match
as a move that fits. “One of the
primary reasons we were inter-
ested in partnering with OXO
is because its employees believe
in being good citizens,” says
AHS Director of Development
Barry Goodinson. “They think
it’s important to give back to
the community.”

A corporate partnership
with the AHS is one of the
ways that OXO manifests its
commitment to giving back. As
the AHS Education Sponsor,
OXO co-sponsors educational
programs such as the AHS
Garden Schools, the National
Children & Youth Garden
Symposium, and the Green Garage®
display at the 2007 Northwest Flower &
Garden Show. In addition, OXO is pro-
viding gardening tools for use by staff
members, interns, and volunteers at the
AHS’s River Farm headquarters.

It is due in part to their familial envi-
ronment and dedication to creating
quality products that OXO has grown
into the successful company that it is
today. “OXO prides itself on its family
atmosphere, and we also got that feeling
with AHS,” says Delevante. “This part-
nership is less like a traditional partner-
ship and more of a friendly collabora-
tion to spread similar goals, for example,
green gardening tactics. We are just be-
ginning to scratch the surface of what we
can do together.”

Courtney Capstack is an editorial intern
for The American Gardener.
‘SPOUT TIME!

Finally, a new spin on Watering Cans! Introducing the OXO Good Grips Pour & Store Watering Cans with a rotating spout for easier filling and space-efficient storing. Water levels in the translucent spout line up with the measurement markings on the body for easy measuring. Available in three sizes: Outdoor (2 gal), Indoor (3 qt) and Mini (1 qt).
The University of Minnesota Landscape Arboretum: Celebrating Children

by Courtney Capstack

The University of Minnesota Landscape Arboretum in Chaska, Minnesota, the host site for the AHS 2007 Children & Youth Garden Symposium, not only is a haven for researchers, plant aficionados, and outdoor enthusiasts, but is also an inviting classroom filled with opportunities for enriching children’s minds and allowing them to connect with nature.

Containing more than 1,000 acres of landscaped gardens, prairie, and wetlands, the arboretum is the largest public garden in the upper Midwest. It offers an extensive variety of activities for children, educators, and families, making the arboretum an ideal setting for the American Horticultural Society’s 15th annual National Children & Youth Garden Symposium from July 19 to 21. “The land of 10,000 lakes has a long history of engaging people of all ages and traditions in the outdoors,” says AHS Education Programs Manager Stephanie Jutila. “Bringing the Symposium to Minnesota is an excellent opportunity to highlight the many innovative programs across the state that engage children and youth in gardening.”

The Garden As Classroom

More than 45,000 children participated in programs offered by the Minnesota Landscape Arboretum last school year. Students explored the environment through various field trips, teacher-led adventures, and a traveling “Plantmobile.” The arboretum’s children’s programs have also garnered numerous awards, including the award for Program Excellence in 1993 from the American Association of Botanical Gardens and Arboretum (now the American Public Gardens Association), and the Minnesota Science Teachers Association Contributions to Elementary Science in Minnesota in 2001.

“With the level of classroom-structured education increasing over the years, the potential is even greater for children to become more disconnected from the environment,” says Tim Kenny, the arboretum’s director of education. “The role of public gardens in education is more important now than ever. As a public garden, we have an opportunity, and even a responsibility, to provide a hands-on, environmental-related learning experience outside of the classroom.”

The arboretum offers 20 different field trips throughout the school year for children in kindergarten through sixth grade. Students can taste fall’s bounty with the “Apple Harvest” trip through the orchard, dive into a tour of four different wetland stations at “World of Wetlands,” or tap into the process of making maple syrup with “Maple Syrup Time.” Other popular trips include dissecting the anatomy of plants, discovering the source of some common items on grocery lists, and investigating the ins-and-outs of pumpkins.
To cater more to the personal needs of each child, the arboretum also offers four different self-guided visits, including “Bug O’ Orienteering,” designed to give students in fifth through eighth grades the opportunity to strengthen their map-reading, navigation, and team-building skills.

Pre-school youngsters are welcome to participate in “Pea Pods Preschool” every other Wednesday morning at the arboretum’s Marion Andrus Learning Center. Seventy-one children participated in the program when it debuted in 2001. Since then, “Pea Pods Preschool” has grown to serve more than 3,600 children and parents during the 2005-2006 school year. Each session explores a different nature-related topic, providing children with enriching experiences to share with their parents.

BUSINESS SKILLS FOR TEENAGERS

As an outgrowth of the urban garden outreach program, the arboretum also offers CityFresh, a summer program designed to give teenagers the opportunity to hone their business and entrepreneurial skills in a nature-related environment. “Our children’s programs were originally aimed at five- to 12-year-olds,” says Kenny. “We found there’s an interest among young teens who’ve enjoyed our programs for a few years and still want more.”

Originating as a program in which teens grew and sold specialty vegetables to local restaurants, CityFresh now offers six different summer work opportunities, from photography and growing cut flowers to teacher assistantships and communications. Thirty-six teenagers are split into six work teams, led by six adult leaders, many of whom once participated in the program themselves. “Being involved in programs sponsored by the Minnesota Landscape Arboretum has helped keep me out of trouble, expanded my future, and given me more motivation and confidence,” says Elizabeth Selander, a former participant and a current program leader.

ACHIEVING SUCCESS

Leaders of the arboretum’s children’s programs focus on two criteria to maintain success. Their programs are continually updated to meet Minnesota’s education standards, and steps are implemented to make the most popular programs accessible to children who may not have had the opportunity to participate because of economic or geographic challenges. “We have a responsibility to keep up with the changing school requirements and environment so [the Minnesota Landscape Arboretum] can continue to provide hands-on experiences with plants,” says Kenny. “What we can do to best serve children is our bottom line, and that constantly changes.”

For more information on the AHS National Children & Youth Garden Symposium this July, turn to the news article on page 9, or visit the AHS website at www.ahs.org.

Courtney Capstack is an editorial intern for The American Gardener.

GARDEN EXPLORATIONS: GALE WOODS FARM

Attendees of the National Children & Youth Garden Symposium will also have the opportunity to tour Gales Woods Farm, a 410-acre educational farm in Minnetrista, Minnesota. As part of the Three Rivers Park District established to encourage environmental stewardship, Gale Woods Farm offers a variety of educational opportunities designed to promote agriculture, food production, and land stewardship.

In addition to presenting farm exploratory tours and seasonal classes, Gale Woods participates in the Community Supported Agriculture (CSA) program, offering 50 crop shares to the local public and youth development opportunities during the summer. More than 10,000 visitors experienced the agriculture education programs at Gale Woods last year, with an additional 5,000 guests enjoying the hiking trails and interpretive displays throughout the farm.

Symposium participants will be able to take tours of the farm, attend lectures and educational programs, and learn about the CSA youth farming program before relaxing with dinner in the picnic pavilion. Visit Gale Woods Farm’s website at www.galewoodsfarm.org or call (763) 694-2001 for additional information about the programs.

—C.C.
CERTAIN PERENNIAL plants have been popular in American gardens for decades; some of them, such as pinks (*Dianthus* spp.), go back to Colonial times. And many old favorites among bellflowers, phlox, and Shasta daisies, to mention a few, have been challenged over the years by the introduction of new “improved” varieties. As a person who loves older plants, I am cautious when it comes to growing “improved” versions. But if the new is really better without sacrificing the charms of the old, then I am all for it.

Not all change, however, is for the better, and many new varieties fall short of expectations. But certain introductions have added to the value of the original, by increasing adaptability or disease resistance, extending the flowering season or range of colors, or improving the form or foliage. Some of these varieties are new; others have been around long enough that they could almost be considered classics themselves.

HEAT RESISTANCE  
What could possibly make pinks more appealing? How about a strengthened constitution so they look good longer? Among newer pinks are those bred for adaptability to hot and humid condi-
tions, and, as a bonus, some are longer blooming than usual.

A cheddar pink (*D. gratianopolitanus*, USDA Hardiness Zones 4–8, AHS Heat Zones 8–1) hybrid worth considering is ‘Feuerhexe’ (Firewitch), chosen by the Perennial Plant Association (PPA) as the 2006 Perennial Plant of the Year. It has everything you could want in a pink: spicy fragrance, colorful magenta-pink flowers over silver-blue mats of foliage, a long flowering season, and excellent heat tolerance in the south. In the north, it has shown a remarkable ability to grow in less than ideal conditions, such as gritty, sharply drained soil. Sue Longe, perennial plant manager for Horsford Nursery in Charlotte, Vermont, reports that it has survived winters with little snow in a damp part of her garden. ‘Greystone’, descended from the classic ‘Bath’s Pink’, has withstood heat and humidity at Plant Delights Nursery test gardens in Raleigh, North Carolina.

Maiden pinks (*D. deltoides*, Zones 3–10, 10–1) make terrific flowering groundcovers. ‘Arctic Fire’, with its small white-ringed flowers, is adaptable to western conditions as well as to the Northeast and blooms all summer.

Like pinks, bellflowers (*Campanula* spp.) have been grown in American gardens since Colonial times. So what’s new? A quiet revolution in bellflower breeding is under way. Led by Terra Nova Nurseries in Canby, Oregon, bellflower breeders are using *C. punctata* as a parent because it is more resistant to heat and humidity than taller types. Southern gardeners will be pleased with the results: ‘Pantaloons’ sports semi-double purplish-pink bells above deep green leaves; ‘Kent Belle’, which grows to 30 inches, produces very showy, long, dark violet-blue bells; ‘Bowl of Cherries’ is a compact, mounding plant with a multitude of purple-red dangling bells. All of these thrive in Zones 5–9, 8–1.

Slightly hardier and definitely showier is ‘Sarastro’ (Zones 4–9, 8–1), an improvement over ‘Kent Belle’ for its more compact habit, extended bloom, and fantastic large, grape purple bells that, according to Susan Martin, director of marketing communications at Walters Gardens in Zeeland, Michigan, “dangle from the stem like crystals from a chandelier.”

New Millennium delphiniums (*Delphinium* hybrids, Zones 3–7, 8–3) have answered the consumer demand for longer-lived, less temperamental plants. Bred by Dowdeswell’s Delphiniums in New Zealand, they are said to have stronger stems, more heavily petaled, showy flowers, and improved tolerance for heat, humidity, and extreme cold.
There’s no disputing the beauty of the New Millennium hybrids for color range and exceptional bloom size. Pierre Bennerup, owner of Sunny Border Nurseries in Kensington, Connecticut, says his favorite among these is ‘Innocence’, a large-flowered, very double white, some with a black or egg-yolk yellow bee—the mark in the flower’s center. He suggests that all delphiniums benefit from winter mulching and meticulous deadheading to prolong bloom and plant longevity.

**DROUGHT TOLERANCE**

Who would have thought that moisture-loving astilbes could be drought tolerant? The most significant breeding within this genus, introduced from Asia in the 1850s, was achieved by German nurseryman Georg Arends, whose 1902 introduction ‘Peach Blossom’ set the standard for astilbes. ‘Peach Blossom’ and other classic cultivars of Astilbe xarendsii (Zones 3–8, 8–1)—such as the fragrant white-flowered ‘Bridal Veil’, clear pink ‘Cattleya’, and vivid red ‘Fanal’—continue to be favorites for shady sites with moisture-retentive soil.

Newer introductions of selections derived from A. chinensis (Zones 4–8, 8–2) have expanded the possibilities of growing astilbes in drier conditions. Nancy DuBrule-Clemente, owner of Natureworks, a specialty garden center in Northford, Connecticut, appreciates great plants that can take care of themselves. High on her list are the A. chinensis hybrids, which can grow in heavy clay. She describes ‘Pumila’ (sometimes listed as var. pumila) as a “totally drought tolerant” workhorse that grows well in both sun and shade. Only a foot tall, it makes a great trouble-free groundcover. She values ‘Visions’ for its big thick magenta spikes, vigor, and late blooming. Both ‘Visions in Pink’ and ‘Visions in Red’ have good color and drought tolerance. Other drought-tolerant astilbes she recommends include lilac A. chinensis var. taquetii ‘Superba’ and the purple-rose ‘Purpurkruze’.

**DISEASE RESISTANCE**

Native garden phlox (Phlox paniculata, Zones 4–8, 8–1), queen of the mid- to late-summer flower border, did not become popular in American gardens until the late 19th century, after the species had been prettied up by the efforts of French...
nurseryman Victor Lemoine and others.

Although many older cultivars are no longer available, you will find some of them at Perennial Pleasures Nursery in East Hardwick, Vermont, where proprietor Rachel Kane carries many garden phlox, old and new. When comparing the newer phlox to the older ones, Kane feels that flower color and length of bloom are not an issue. As for powdery mildew, although some varieties are more susceptible than others (whether old or new), her advice is to divide plants regularly, replant in fresh enriched soil, and keep them well watered. Planting phlox in moist, well-drained soil, similar to their wild habitat, also helps. ‘David’, the PPA’s 2002 plant of the year, is without question one of the best for mildew tolerance. Growing four to five feet tall, with fragrant white blossoms that bloom from midsummer to frost, it has all the attributes we value in this favorite flower, and it has proven successful all over the country.

Other modern phlox with good disease resistance include ‘Robert Poore’, which came from Mississippi, so it’s humidity tolerant as well. It grows to five feet and is, Kane says, “magenta-ish” as well as vigorous. ‘Shortwood’, a cross between ‘David’ and ‘Eva Cullum’, is a vigorous medium pink. My own favorite for disease resistance and flower color is ‘Laura’, a striking plant to three feet with large flower heads of vivid pink-purple with a central star.

**MORE COLOR, BETTER FORM**

The Shasta daisy (*Leucanthemum ×superbum*, Zones 5–8, 8–1) has a long history of popularity in American gardens. Created by Luther Burbank, it possesses the ideals that fueled his breeding efforts: large daisy flowers with pristine white petals held on sturdy stems and produced over a lengthy period. Named for the mountain in California near where Burbank worked, the first-named introductions in 1904 included ‘Alaska’, still the standard by which all other cultivars are judged.

Ironically, one of the most recent, ‘Broadway Lights’, is widely touted for its yellow flowers. Yellowish or cream-white Shastas seem like a contradiction, since Burbank strove so hard to produce a pure white flower. But ‘Broadway Lights’ is attractive; growing to 16 to 20 inches, it is shorter than the standard, with a neat, mounding habit. Its yellow buds open to cream-white, although the flower color is said to be more yellow in cool conditions. ‘Becky’, the 2003 Perennial Plant of the Year, was discovered in Georgia. It challenges ‘Alaska’ by delivering a similar, but more heat-resistant plant on upright stems to 40 inches with three-inch-wide flowers.

Native sneezeweeds (*Helenium* spp.) are making a big impression among gardeners who have never grown them before. The newer cultivars have hot, bright colors, late bloom, and improved habit in their favor. Like other American natives, they come back to us after being bred in Europe. Using a mix of species that grow throughout the country in wet meadows and prairies, new cultivars got their start as classic perennials in the 1930s with the introduction from Holland of ‘Moerheim Beauty’ (Zones 4–8, 8–1), which set the standard for this group of late bloomers. Still considered one of the best, its rich bronze-red daisylike flowers grow on three- to four-foot stems.

Older ones still grown include ‘Riverton Beauty’, late flowering with lemon-yellow petals surrounding a purplish disk, and ‘Riverton Gem’, which tops out at three-and-a-half feet, with gold petals suffused with terra cotta. Earlier flowering ‘The Bishop’ grows to only two feet and bears a profusion of buttercup yellow flowers from early summer to fall (shorter types are recommended for the south). Newer introductions, such as bright cop-
per-orange ‘Coppelia’, are self-supporting even though their stems reach three feet. ‘Mardis Gras’, which grows to 40 inches, bears yellow flowers splashed with orange-red. It grows in clay soil, and begins blooming in late June. Considered one of the best for overall performance, ‘Butterpat’ is a compact plant to three feet, with strong stems and sprays of rich deep yellow flowers. The latest introductions from Holland include ‘Double Trouble’, a double-flowered bright yellow to 32 inches, and ‘Ruby Tuesday’, a dwarf that can be grown in a container. Twenty inches tall, it bears deep ruby-red flowers from mid-summer on. Expect more to come.

DAYLILY UPDATES
Among daylilies (Hemerocallis spp.), ‘Hyperion’, an early hybrid (1924), is still loved for its clean lemon-yellow trumpet, extended bloom, and fragrance. After World War II, daylily breeding took off and there are now 40,000 registered cultivars that often depart from the classic form with their recurved petals, narrow and spidery or overlapping, often heavily ruffled, in colors that range from near white with shades and mixtures of peach, pink, and purple. Flowers, eyed and with contrasting throats, can be huge, to eight-and-a-half inches in diameter, and dusted with gold or silver.

Ask experts about their favorite updates and their answers are an eclectic mix of types. Yellow-gold ‘Kindly Light’ (1949) is a classic spider unsurpassed for its huge, open trumpet that shows up well in the landscape, according to Warren Leach, co-proprietor of Tranquil Lake Nursery in Rehoboth, Massachusetts. Connecticut garden writer Sydney Eddison, whose passion for daylilies helped to boost their popularity, loves the deep gold, double flowers of ‘Condilla’ (1977), the cream-pink early bloomer ‘Lullaby Baby’ (1975), and ‘Little Grapette’ (1970), an early and extended bloomer with smaller flowers that roll up neatly when spent. For Chad Walters, plant inventory manager at Walters Gardens, his favorites include ‘Pardon Me’ (1982), a reblooming bright cranberry red, and ‘Bela Lugosi’ (1995), a huge velvety-wine tetraploid. Personally, I love ‘Fairy Tale Pink’ (1986), a peach-pink ruffled rebloomer.

Breeding trends follow the huge success of hardy, everblooming ‘Stella d’ Oro’ (1985), the most popular daylily today. It provides color over an entire season and is especially useful for gardens in the north, where everbloomers are not usually hardy. Some dislike its brazen gold color, but it is very attractive when it is cooled down with silver and gray-green foliage. One of its most successful spinoffs is ‘Happy Returns’ (1986), bred by Darrel Apps of Woodside Nursery in Bridgeton, New Jersey. It is heat tolerant and bears fragrant, clear yellow, reblooming flowers.

Older classic perennials will continue to be grown and loved, but as the updated versions prove their value and find their way into more gardens across the country, they may become classics, too.

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The abundant late-summer and autumn flowers of Helium ‘Moerheim Beauty’ provide a bold accent to gardens.

Sources


Resources


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The abundant late-summer and autumn flowers of Helium ‘Moerheim Beauty’ provide a bold accent to gardens.

Fragrant blooms of Hemerocallis ‘Lullaby Baby’ occur over a lengthy season on sturdy, branched 18-inch scapes.

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Jo Ann Gardner and her husband operate a small farm in the Adirondacks. Her most recent book is Elegant Silvers: Striking Plants for Every Garden, with Karen Bussolini (Timber Press, 2005).
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Available at fine garden centers nationwide.
For Nellie Gardner, sharing the joy of growing and arranging cut flowers is all in a day’s work.

ARTICLE AND PHOTOGRAPHS BY CHRISTINE FROEHLCIH

Top: Buckets of field-harvested amaranth, gomphrena, celosia, static, and ageratum are destined for fresh bouquets and dried wreaths. Left: Nellie Gardner creates and sells the arrangements at her barnside business, “Flower Fields.”
ONE DAY LAST FALL, I decided to take advantage of the unseasonably warm weather with a visit to Springdale Farms, where a friend of mine grows cut flowers. And not just a row or two—she grows entire fields—about two acres of them. But then, you might expect that from someone with a name like Nellie Gardner.

Nellie, an accomplished horticulturist with an agronomy background, operated a successful cut flower business appropriately named “Flower Fields” in Batavia, New York. Last year, she transplanted it to Springdale Farms, a public park in Spencerport, New York. This venture has allowed her to combine her passion for growing flowers with the satisfaction of sharing her knowledge with others.

A FARM WITH A MISSION

The 200-acre farm dates back to 1876, when it functioned as an orchard. Some of the old stone buildings remain, still in use. Since the late 1960s, when it was purchased by Monroe County, it has become a model for educating the public about working farms. A program offered through Christian Heritage Services provides disabled adults with opportunities to help care for the animals and grounds, and to assist with group tours and visitors. (For more information on Springdale Farm, visit www.heritagechristianservices.org or call (585) 349-2080.)

Nellie’s flower business works in conjunction with and enhances the farm’s mission. Her flower fields and display gardens teach and inspire visitors, and provide therapy for the disabled who work in them. “I’ve always thought that landscaping should have a purpose,” says Nellie. “Plants should be beautiful and useful.” Garden tours, demonstrations, and classes are given during the seasonal events the farm celebrates.

Visitors to the farm are fascinated with the connection of garden to table. Even children are interested. Why not? Vegetables
are craftily tucked into a pizza garden planted just for them. This is not a hands-off public garden. Nellie finds it rewarding to help people experience the connection between growing plants and how they are used. Before she arrived, participants in the program were limited to taking care of the animals. Now they help grow, harvest, and make the flower bouquets that are sold to the public and produce income for the farm. “It’s very satisfying for them to be directly involved in this small business they helped to create,” she explains.

**GARDEN CONNECTIONS**

Since her arrival, Nellie has transformed the grounds into a variety of themed display gardens. Four beds on either side of a long grass path are planted in large blocks, providing efficient access for maintenance and harvest. A walk through the children’s garden, biblical garden, and sensory garden lead you to a pergola covered in grape vines—a shady spot with comfort-
Foolproof Cut Flowers

To grow your own cut flowers, you don’t need a lot of space or even a dedicated cutting garden. Many flowers that are used for cutting make stunning additions to the mixed flower border. Nellie offers the following tips for growing cut flowers in your backyard:

- Space your flowers close together, six to 10 inches apart, depending on their size. Close spacing encourages longer stems and less side branching.
- Water plants before they look like they need it. Stressed plants do not bloom well.
- Practice regular deadheading and cutting to ensure continual bloom.

The following are some of Nellie’s favorites:

- *Ageratum houstonianum* ‘Blue Horizon’, 1½ feet tall, purple-blue fuzzy flower heads on sturdy stems
- *Amaranthus ‘Opopeo’*, 4 to 7 feet tall, red, upright spikes, burgundy infused leaves
- *Antirrhinum majus* (snapdragon) *Rocket series*, 3 to 4 feet tall, two-lipped flowers on upright racemes in a broad range of colors
- *Celosia ‘Hi-Z’*, 3 to 4 feet tall, magenta wheatlike flower spikes on reddish stems
- *Dahlia Karma series*, 2½ to 4 feet tall, wide range of flower colors and shapes, long vase life
- *Eustoma grandiflorum* *Echo series* (syn. *Lisianthus russellianus*), 2 to 3 feet tall, large double flowers in shades of blue, rose, and white
- *Gomphrena globosa* (globe amaranth) ‘All Around Purple’, 2 feet tall, rounded, purple flowers on stiff stems
- *Rudbeckia hirta* ‘Prairie Sun’, 2½ feet tall, yellow tipped orange rays around light green center
- *Salvia farinacea* (mealycup sage) ‘Blue Bedder’, 2 to 2½ feet tall, slender, upright stems of long lasting blue flowers
- *Zinnia elegans* ‘Benary’s Giants’, 3½ to 4 feet tall, large double flowers in a variety of colors

Regular cutting and deadheading promotes the continuous production of new flowers all season long.

I left Springdale Farm and Nellie’s shop inspired, my car loaded with a variety of her favorite flowers, with hopes of reproducing some of her magic in my own home and garden.

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Freelance writer, photographer, and garden designer Christine Froehlich lives in Sodus Point, New York. She is also the director of the Rochester Civic Garden Center.
KING MIDAS might have been a happier man had he craved rudbeckias instead of gold. He would certainly have been a richer gardener, for rudbeckias offer satisfactions no inert metal can match. Their golden blooms capture the sun in their ray petals and attract butterflies to their blossoms and birds to their ripening seed. They’re easy to grow, adapting well to an astounding range of climates and soils. They make splendid cut flowers, too. But perhaps the genus’s greatest gift to American gardeners is that it tends to bloom during the most difficult of seasons, high summer, when heat—and often drought—is a given over much of the United States.

The genus *Rudbeckia* is a uniquely American one, with roughly 25 species of black-eyed Susans crisscrossing the continental United States and edging into Canada. Many are herbaceous perennials, though a handful of biennial and annual rudbeckias exist. Most of our best-known garden rudbeckias have native or naturalized ranges that span vast stretches and several USDA hardiness and AHS heat zones, while some obscure natives lay claim to only a small portion of a single state.

Members of the aster family, sun-loving rudbeckias typically produce daisy-type, disk-and-ray flowers, though in one species, western coneflower (*R. occidentalis*), the broad ray petals are lacking. The bright yellow petals surround gently mounded or cone-shaped disks that vary from black and deep brown to green.

In addition to thriving in the high heat of summer, rudbeckias attract a variety of wildlife. “Bees, wasps, flies, butterflies, and beetles could not be kept away from an entertainer so generous,” wrote popular American nature author Neltje Blanchan in *Nature’s Garden*, published in 1900. Gardeners may also find an assortment of finches, grosbeaks, and sparrows nibbling on the seeds.

**LONG-LIVED SPECIES**

If perennials had a hall of fame, *Rudbeckia fulgida var. sullivantii* ‘Goldsturm’ (USDA Zones 4–9, AHS Zones 9–1) would be one of its honored members. Discovered in 1937 by an employee of German nurseryman Karl Foerster, ‘Goldsturm’ is arguably one of the 10 most popular perennials in the United States. By now almost every gardener in America has seen its egg-yolk yellow, black-eyed blossoms and low-growing mounds of deep
forest green foliage. It bears a profusion of two- to three-inch blooms that open atop branched, two- to three-foot scapes beginning in midsummer.

‘Goldsturm’ does suffer from a flaw: It shrivels in hot dry summers, and if drought comes during bloom time, flowering is severely curtailed. But in moisture-retentive soils, it blooms exuberantly for six to eight weeks. ‘Goldsturm’ spreads quickly, forming a weed-suppressing, three-foot-wide colony in three years.

Standing in the shadow of ‘Goldsturm’ is what, in my experience, is an even better black-eyed Susan: the orange coneflower (Rudbeckia fulgida var. fulgida, Zones 4–9, 9–1). This winsome creature is more delicate than ‘Goldsturm’ in both leaf and flower. Its two-inch blossoms are more numerous, its bloom season longer (from mid-July to October), and it is a far tougher plant in a drought.

Although seed is often sold in catalogs, ‘Goldsturm’ is a named cultivar and should be propagated vegetatively. Orange coneflower, however, is often grown from seed. Genetic variability can lead to differences in size and vigor, though typically it forms a 24- to 30-inch-tall plant. Since their bloom seasons overlap and their colors are closely matched, ‘Goldsturm’ and orange coneflower make attractive echoes of one another in border designs.

If you’re only familiar with the dark, bristly foliage of ‘Goldsturm’, prepare for a shock when you see the cabbage-leaf coneflower (R. maxima, Zones 4–8, 8–1). It produces rosettes of waxy, blue-gray foliage; the individual leaves are paddle-shaped and nearly a foot long. Throughout spring, cabbage-leaf coneflower is content to remain low-growing, but in early summer it sends stiff, nearly leafless five- to eight-foot stems careening skyward, bursting into bloom with skirts of golden petals ringing two-inch brown cones. The stems may topple in loose, overly rich soil, but on sandy soil or heavy clay they stand straight. Though it’s native to moist prairies of the south central Unit-
the American Gardener

ed States, cabbage-leaf coneflower nevertheless copes well with drought.

Shining or green-eyed coneflower (*R. nitida*, Zones 5–8, 8–1) is native to the southeastern United States, but the species is seldom grown in gardens. It is best known for its cultivar ‘Herbstsonne’ (Autumn Sun), although this is probably a hybrid involving *R. laciniata* parentage as well. The flowers are exquisite: sulfur-yellow, reflexed petals surrounding distinctive, raised green cones. ‘Herbstsonne’ produces its bright four-inch flowers from August to October, atop sturdy, five- to seven-foot stems cloaked in glossy green leaves. To perform at its best, ‘Herbstsonne’ needs sufficient water, and when grown in very rich soils it’s likely to need staking. Some gardeners consider ‘Herbstsonne’ invasive, but I’ve never found it to be so in my North Carolina garden. Another cultivar, ‘Goldquelle’, bears double golden flowers on six-foot stems. As with ‘Herbstsonne’, reviews are mixed as to its invasive potential.

Native to moist places from Canada to Montana and south to Florida and Arizona, the cutleaf coneflower (*R. laciniata*, Zones 3–9, 9–1) grows in low, wet spots. Every summer it catches my eye with its five-foot, silvery-green stems and deeply cleft foliage with pale mid-veins. Beginning in midsummer it blooms at the tips of widely branched stems, producing small lemon-yellow blossoms with reflexed petals and protruding lime green cones.

While it is lovely in roadside ditches, I may have erred in bringing cutleaf coneflower into my garden. It self-sows freely, wedging its offspring into inconvenient places. But I’ve not been able to bring myself to oust it, since birds and butterflies find it as attractive as I do. Sunny or lightly shaded sites are suitable, provided they offer sufficient moisture. Two double-flowered cultivars exist: three- to five-foot tall ‘Golden Glow’, and two- to three-foot ‘Gold Drop’.

Another denizen of moist locations, *R.*
DESIGNING WITH BLACK-EYED SUSANS

When I add a new rudbeckia to my garden, I look for partners that echo and contrast both color and texture. The saturated colors of most coneflowers find their match in other exuberant tones: fiery oranges and reds, burgundy, strong purples and blues. Contrast comes from using subtler shades, like the steely-blue foliage of grassy *Panicum virgatum* ‘Heavy Metal’, or the rusts and russets found in spiky cordylines, phormiums, and carexes. Red-hot poker plants (*Kniphofia* spp.) and numerous daylilies (*Hemerocallis* spp.) offer bold colors as well as contrasting flower and foliage texture. The flaming tubular flowers and gladioluslike foliage of crocosmias are custom-made for combining with rudbeckias, while the dark blue or purple flower spikes of veronicas and salvias make a handsome contrast to their golden daisies. Rudbeckias look lovely with a sweep of carpeting verbenas (such as *Verbena canadensis* ‘Homestead Purple’) at their feet, or use tall, airy *V. bonariensis* as a scrim if you can tolerate its self-sowing.

Soft-colored rudbeckias—such as sulfur-yellow *Rudbeckia* ‘Herbstsonne’ or *R. laciniata*—need a gentler touch, so rather than choosing super-saturated shades, I look for medium-toned or pastel companions. Pale blue-violet *Salvia guaranitica* ‘Argentine Skies’, buttery yellow or peachy-pink daylilies, and pale purple veronicas blend beautifully with the coneflowers’ delicate tones.

When ‘Goldsturm’ first became popular, almost every gardener in America planted it next to *Sedum* ‘Autumn Joy’. It is an excellent pairing, if widely overused; the sedum’s domed flower heads open their tiny blooms in time with rudbeckia’s broad golden daisies. Other sedums such as dark-leaved ‘Maron’ and ‘Purple Emperor’ offer new possibilities, as do low-growers such as ‘Sunset Cloud’ and ‘Vera Jameson’.

Over the last two decades, ‘Goldsturm’ and other coneflowers have starred in the “New American Garden” style—championed by designers Wolfgang Oehme and James van Sweden—which utilizes drought-resistant perennials and grasses to achieve a prairie look. But don’t let that cramp your style: While rudbeckias look very natural overhung by amber waves of grain, they also shine with bold tropicales such as purple-leaved *Canna* ‘Wyoming’ or yellow-striped ‘Striata’ (aka ‘Bengal Tiger’). Lantanas also work well with rudbeckias, adding crisp green foliage and non-stop clusters of brightly colored blooms.

Rudbeckias can also be combined with woody plants in mixed borders. They shine in front of burgundy- or black-leaved shrubs such as *Sambucus nigra* ‘Black Lace’, Physocarpus opulifolius ‘Summer Wine’, or (where they aren’t invasive from seed) purple barberries (*Berberis* spp.). Summer-flowering shrubby companions include oakleaf hydrangea (*H. quercifolia*); *Hydrangea paniculata*; bush clover (*Lespedeza thunbergii*); purple-spired chaste tree (*Vitex agnus-castus*); and repeat-blooming shrub roses. Species that bloom in late summer and fall combine exquisitely with the metallic violet berries of native beautyberry (*Callicarpa americana*).

Wildflower meadows make perfect homes for rudbeckias. Other meadow-worthy natives that bloom concurrently include: bright red *Hibiscus coccineus*; butterfly weed (*Asclepias tuberosa*); purple-spiked blazing stars (*Liatris* spp.); Joe Pye weed (*Eupatorium* spp.); switchgrass (*Panicum virgatum*); wild petunia (*Ruellia humilis*); anise hyssop (*Agastache foeniculum*); licorice plant (*Agastache rupestris*); bergamot (*Monarda fistulosa*); and rattlesnake master (*Eryngium yuccifolium*).
Rudbeckia subtomentosa (Zones 4–7, 7–1) grows from Michigan and Wisconsin south to Louisiana. Known as sweet coneflower for its fragrant, gray-green foliage, it bears loose cymes of lemon-yellow blossoms in late summer and early fall. The flowers have a perky look, thanks to slightly upturned flower petals that ring reddish-brown cones. The attractive, deep green leaves are three-lobed and lightly toothed. Sweet coneflower grows three to four feet tall, though some gardeners recommend pinching the tips in spring to produce more compact plants with stronger stems. It prefers moist conditions and accepts any fertile soil. If you’re adventurous, try five-foot-tall ‘Henry Eilers’, whose flowers sport unusual quilled ray petals.

Rough coneflower (R. grandiflora, Zones 5–9, 9–5) produces bright yellow blossoms with short, reflexed petals surrounding burnished brown cones. In spring it forms a basal rosette of showy, foot-long green leaves similar in texture to R. maxima, but as it grows upward, rough coneflower produces plentiful foliage along its three- to four-foot stems. It blooms in early summer, with one big blossom crowning each stem. Native from the Mid-west south to Texas, Louisiana, Mississippi, and Georgia, rough coneflower is a tough prairie plant that tolerates drought.

Western coneflower (R. occidentalis, Zones 3–9, 9–4) is enjoying a spell of popularity thanks to being marketed as the cut flower ‘Green Wizard’. A four- to five-foot-tall perennial native to the western United States, it produces domed, deep chocolate-purple cones. Though it lacks the colorful ray petals typical of the genus, green bracts form a stiff ruff around the central cone and are prominent enough to resemble petals. Western coneflower prefers sunny to partly sunny sites and plentiful moisture. It makes a long-lasting cut flower and can also be dried.

**SHORT-LIVED SPECIES**

Brown-eyed Susan (R. triloba, Zones 3–11,
12–1) is a biennial or short-lived perennial native or naturalized over the eastern and midwestern United States. A multi-branched, three- to five-foot plant, brown-eyed Susan bears hundreds of petite golden blooms from early summer until nearly frost. In many seedlings, wine-red stems offer additional color. Brown-eyed Susan performs best with a little moisture but tolerates dry conditions. Because it freely self-sows, it’s an excellent plant to use in wildflower meadows.

Then there’s two- to three-foot tall true black-eyed Susan (R. hirta, Zones 3–9, 10–1), a plant so adaptable it is native or naturalized over the entire continental United States except Nevada and Arizona. It flowers in open woods, meadows, and along roadsides from May to October, bearing its familiar golden-petaled blooms. Black-eyed Susan is an annual, biennial, or short-lived perennial, its longevity often determined by its susceptibility to fungal diseases in rainy or humid climates. Its pubescent leaves and stems trap moisture that can lead to its decline.

Nevertheless, it makes a fabulous cut flower, especially the tetraploid versions—those forms bred with extra sets of chromosomes—collectively known as gloriosa daisies. A number of handsome selections exist, all easy to grow from seed. The flowers are considerably larger than those of their diploid parent, often five to six inches wide. They may be solid yellow or wonderfully painted with mahogany, rust, or russet tones. ‘Rustic Colors’ offers a dramatic mix of multi-colored blooms on three-foot stems. ‘Indian Summer’, an All-America Selections (AAS) winner, bears brilliant golden flowers on 30-inch plants; equally tall ‘Irish Eyes’ boasts yellow petals surrounding green cones. Slightly taller, ‘Irish Spring’ produces similar yellow petals and green cones; it makes a great cut flower. Dwarf forms such as 10-inch-tall ‘Toto’ are available, as are a handful of double-flowered selections, including another AAS winner, 16-inch-tall ‘Cherokee Sunset’, with flowers in a mix of yellow, bronze, and mahogany.

THE GOLDEN TOUCH

Unlike King Midas, whose golden touch nearly doomed him, we can safely turn our gardens gold all summer simply by harnessing the power of rudbeckias. Considering the many species and cultivars of Rudbeckia available, there are plenty of choices to make our gardens glitter even when all the other plants are sulking!

Garden writer and former nursery owner Pam Baggett lives in Cedar Grove, North Carolina.
Tucked away in Cincinnati’s Ault Park is an unheralded ornamental border in which an eclectic combination of herbaceous perennials, tropicaLs, and annuals joyfully mingle.

BY MICHAEL CUNNINGHAM

This is no tidy, well-behaved bedding out scheme, but a riot of flower and leaf, of color, texture, and form. My wife initially referred to it as the “witchy” garden, having in mind our copy of the folktale Rapunzel and its illustration of the witch’s garden as wild, unnaturally lush, and clearly sinister. While this comparison has romantic appeal, there is nothing really sinister about these mixed borders, though some of the old shrub roses do have scary looking spines, and I find the castor bean plants (Ricinus communis)—with their huge, star-shaped leaves, ungainly stature, and clusters of spiky
seedpods bearing the notoriously poisonous seeds—a little ominous.

What impressed me was the sheer vegetable mass of these borders, the profusion of stem, leaf, and flower, with some plants towering above our heads, and the density of it all implying great fertility in the soil.

Tall herbaceous plants form the borders’ backbones. In addition to the castor beans, there are many kinds of ornamental grasses, including giant reed (*Arundo donax*) with its skyward plumes, an abundance of cannas with their bold, beautiful leaves, and various tallgrass prairie natives such as the deep-rooting silphiums and the many-flowered sunflowers (*Helianthus* spp.) that grow to 12 feet tall.

Among, around, and in front of these are hundreds of other annuals and perennials, all weaving together into a sort of herbaceous tapestry. In a classic herbaceous border, the perennials are planted in drifts and given enough room so that each kind shows to its best advantage. Here, in contrast, there is the kind of mixing and competition one finds in a fertile meadow, but with such vitality that I think of it as an homage to the American prairie, its wild exuberance distilled and confined to four formally shaped beds.

**THE DESIGNER**

The creator of these borders is a modest but enthusiastic city employee named Brian Vorholt. By some enlightened policy, his primary job is to make this garden.

The first time I met Vorholt, he was sitting on a park bench with a clipboard on his lap, earnestly tapping a calculator. He was, he told me, trying to finish a plant order for next spring. The city has its own greenhouses, which produce plants for all the city parks. Vorholt was allotted 5,600 plants, but the order had to be turned in that day or he wouldn’t get any.

Such procedures and deadlines are the essence of a bureaucracy, but they seemed incongruous to me that day, sitting on that park bench and looking at that unfettered garden. Vorholt, as I now knew, was a city employee, part of a bureaucracy, yet the...
wonder of it was that he managed to be that unbureaucratic thing, an artist.

Vorholt’s horticulture and design expertise has mainly been learned through experience, but he has also benefited from a certificate program in horticulture he took at the University of Cincinnati. “It’s kind of a passion for me, so learning came easy,” says Vorholt. He is the only full-time person designing, planting, and maintaining the border as well as a nearby garden in the park dedicated to old-fashioned roses. In summer, he has the assistance of a seasonal laborer.

That Vorholt is an artist is evident, but how he does it is not so obvious. The key is not in specific techniques, but in his attitude toward the process. I had not talked with Vorholt for long before I realized that he saw himself and the garden as involved in a cooperative venture. He has been making the garden for 10 years, and each year’s garden incorporates what he learned from it the year before—and sometimes experiences in his home garden.

“There wasn’t a whole lot in the border when I started,” recalls Vorholt. “Because I didn’t have much of a budget, a lot of the plants I initially grew were from seeds collected from my home.” Now he can supplement the stock of perennials he has built up in the border with annuals from the city’s greenhouses. In addition, he gets a small budget from the city—about $1,000 annually—with which he purchases a few new plants from nurseries each year.

A good example of how Vorholt learns from observation is his experience with the voodoo lily (Sauromatum venosum), an aroid native to the Himalayas. He had read that it is not hardy in the Cincinnati area, as anyone might assume from its tropical-looking leaves. Vorholt, believing it was tender, treated it in the same way he treated cannas and elephant ears, storing the bulbs over the winter in a frost-free place.

That is until one spring, when he noticed voodoo lilies growing on the compost pile. Apparently during the fall clean up some of the bulblets had accidentally been thrown on the compost pile and, having survived the winter, sprouted. This indicated to Vorholt that the voodoo lily might in fact be hardy in Cincinnati, and so it has proved to be. He now treats it as any other perennial for shade, and a dozen or so rise impressively through a carpet of barrenwort (Epimedium spp.) at the shady end of one of the borders.

**CULTIVATING VOLUNTEERS**

Each spring innumerable volunteer seedlings come up in the four mixed borders, and Vorholt has to respond to them in some way. They can’t all be left to grow, but they are too valuable to waste. The garden is, in effect, its own nursery. It perpetually makes more plants, and there is always an excess.

Through experience, Vorholt has learned to recognize these seedlings when they show their first true leaves, and he can visualize the effect they might have in the border. By eliminating some and improvising with the rest, he chooses one garden from the many that are possible.

In early spring, Brian Vorholt divides perennials, weeds out unwanted volunteers, and does a little cleanup in the mixed borders he designs and maintains in Cincinnati’s Ault Park.
I don’t mean to imply that Vorholt deliberates over every seedling. There are plenty of unplanned effects as well. One that caught my eye involved the annual Mexican sunflower (*Tithonia rotundifolia*). It usually forms a six-foot-tall bush, but here a single branch had forced its way up among the white-striped blades of a variegated maiden grass (*Miscanthus sinensis ‘Variegatus’*) and had opened a little bouquet of glowing orange-red daisies.

Vorholt’s approach allows for such fortuitous effects, within his own designs. For instance, he is careful to preserve seedlings of a tall, upright artemisia that was in the garden when he took it over. With its silvery-gray leaves and austerely formal habit, it makes an effective accent against the general exuberance. Vorholt likes to grow it at regular intervals along the walkways, where it serves as a unifying element.

While the artemisia is perennial, it is not long-lived, and Vorholt is dependent on self-sown seedlings to renew his stock. A very different case is *Perilla frutescens*, a plant that because of its dusky-purple leaves is sometimes mistaken for a tall coleus. Although perilla is an annual, it is a dependable self-sower—sometimes to a fault. The seedlings tend to come up in tight colonies around the mother plant, and they are easy to recognize by their purple leaves. Unlike the formal placement of the artemisia, Vorholt uses perilla to fill in wherever he feels there might be holes in the border, so they appear haphazardly throughout.

Vorholt orchestrates the effects of many such volunteers, each with its own habits and uses. In addition to perilla, there are several kinds of cosmos, a tall celosia with purple spikes, cleome with its spidery flowers and, most dramatic of all with its glaring variegation, snow-on-the-mountain (*Euphorbia marginata*).

Vorholt is able to avoid much weeding by the simple expedient of deadheading. By keeping troublesome plants from going to seed, he goes a long way toward getting only the seedlings he wants the next spring.

In other cases, the plants themselves may be desirable, but an increase in their numbers is not. Joe-Pye weed (*Eupatorium purpureum*), for instance, with its tall,
canelike stems that lean with the weight of its large panicles of purplish-pink flowers, is valuable to the garden, but Vorholt doesn’t want more than he already has. This native perennial would spawn seedlings all over the place if it weren’t deadheaded. Such is the case with many plants in the garden, particularly the prairie natives.

But Vorholt does let the seeds develop on certain plants even though he doesn’t want their seedlings. For one thing, he is interested in attracting wildlife to the garden, knows which birds eat what seed, and is willing to do some extra weeding to let the birds feed.

Then, too, many of the seedheads, seedpods, and fruits have a beauty of their own. Wild senna (Senna hebecarpa), for instance, is a large, shrublike perennial attractive for its locustlike leaves and yellow pea-flowers in summer. Its most ornamental period, however, is in the fall when the small, oval leaflets turn yellow and the seedpods darken to ebony. So Vorholt waits until the leaves begin to fall, then quickly removes the seedpods before they shatter and drop their seeds.

**PLANT COMBINATIONS**

I mentioned the chance combination of the Mexican sunflowers with the variegated maiden grass as a pleasing touch. There are many such details, planned and unplanned, throughout the borders. Vorholt occasionally takes the liberty of putting together a combination that looks unplanned. Not all the chance combinations are successful, but when they are, they give you a feeling of surprise.

One that works well pairs tassel flower (Emilia javanica) with Lantana ‘Samantha’. Vorholt, as he was planting the lantana, was inspired to sprinkle among the plants some seed of the tassel flower. It soon grew up through the lantana but, with its wiry stems and sparse leaves, was nearly inconspicuous until the small but vivid red flowers began to open a foot above the mound of lantana. It’s a delightfully playful combination.

As I walked around the garden with Vorholt, several people came up to ask him a question or to express appreciation. Judging by what they said, it was not the details I was so taken by that interested them, but the overall effect, the surprising exuberance, the barely contained wildness, in short, the “witchiness.”

It is not witchcraft, however, that makes such a garden possible, but the whole arsenal of Vorholt’s gardening skills and experience. I have focused on his management of self-sowing plants because it seems unique to the Ault Park border, but this is only one of the skills required. Among the others, we must not forget the daily grooming required in a public garden to keep it looking as good as possible. It takes a lot of work to keep a garden looking so intriguingly unruly.

Michael Cunningham is a freelance writer and gardener in Cincinnati, Ohio.
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Add a potpourri of texture, citrus fragrance, and lemon-fresh taste to your garden and cuisine with these easy-to-grow herbs.

**Lemon-Scented Herbs**

*BY KRIS WETHERBEE*

Growing up in southern California, I had ready access to fresh lemons courtesy of two backyard trees brimming with fruit. The citrus fragrance of a fresh cut or grated lemon was always enticing in itself, but it is the homemade lemonade that I still remember best.

My husband and I moved to Oregon many years ago, so growing lemons is no longer a reliable option. But we have discovered through experimentation that even when you can’t pluck a fresh lemon from a tree, there are other plants we can grow that provide wonderful lemon aroma and flavor.

Herbs such as lemon verbena, lemon grass, and lemon balm not only imitate the aromatic essence of fresh lemons, they also enliven our garden with an enticing variety of texture, color, and form. And their lemony culinary characteristics always bring out the best in practically any food. They sizzle in stir-fries, perk up the flavor of casseroles, lend a light touch to marinades and soups, and enhance the flavor of baked goods and desserts.

Lemon-scented herbs have a well-established history of culinary and medicinal uses. Lemon balm was steeped in wine by the Greeks, mixed into perfume by the French, and grown in Thomas Jefferson’s gardens at Monticello. Lemon verbena caught the attention of Spanish explorers when they happened upon its native habitat in Chile and Argentina. And lemon grass has had a presence in Asian cookery for centuries.

Yet, in spite of the long history of use for lemony herbs, their ornamental value is still quite underappreciated.

**MIX AND MATCH**

Lemon-scented herbs are easily integrated into most any garden, whether it’s a container garden on a deck or patio, a front entry garden, an herb bed outside your kitchen door, or a vegetable garden in your backyard. They combine easily in a mixed ornamental border or can be featured in a special lemon-themed garden.

For example, you can use spreading or low-mounding forms of lemon thyme in the rock garden, as a groundcover in “tree-themed” container plantings, or to fill in the nooks in a rock wall or the cracks between pavers. ‘Goldstream’ lemon thyme, with its woven mats of gold-flecked foliage and pale pink flowers, is visually striking and aromatically appealing as a lemon-scented groundcover. With its dark green leaves and more upright bushy habit, lemon thyme also makes an ideal edging plant.

Lemon grass provides a visual contrast of texture that serves as an attractive foil for ornamentals such as catmint (*Nepeta* spp.) or most any salvia; garden annuals such as zinnias, nasturtiums, garden verbena, or Swan River daisy (*Brachyscome iberidifolia*); or even with cabbage, lettuce, peppers, and other annual vegetables. Create a tantalizing ensemble of scents by growing lemon verbena with chocolate cosmos (*Cosmos atrosanguineus*) and star jasmine (*Trachelospermum jasminoides*) used as a vanilla-scented groundcover. With its light green leaves splashed with yellow-gold, variegated lemon
balm provides an eye-catching contrast when paired with purple sage (*Salvia officinalis* ‘Purpurascens’) or any pink-flowering dianthus.

**LEMONY LOWDOWN**

Lemon fragrance and flavor aren’t the only attributes that lemon verbena, lemon basil, and other lemon-scented herbs share. With the exception of lemon thyme, which prefers light, dry soil, these herbs generally grow best in fairly rich, well-drained soil that’s kept moderately moist. All these plants also benefit from periodic branch-tip pruning to encourage more leaf production and a bushier appearance. And if you plan to use any of the herbs discussed on the following pages for cooking or therapeutic purposes, it is especially important to avoid using synthetic pesticides on them.

To help you decide which lemon herbs to grow, here’s an introduction to seven plants I have had great success with in my garden and kitchen.

**LEMON VERBENA** (*Aloysia triphylla*, USDA Hardiness Zones 8–11, AHS Heat Zones 12–8) is a favorite among many, myself included, with the most intense, lemonlike scent and flavor. This graceful, semi-evergreen shrub or tender perennial grows three to five feet tall in cooler climates, and 10 to 15 feet in frost-free regions. Attractive foliage sets off long terminal racemes of tiny pale purple to white flowers in summer. Grow it as a specimen plant in the herb garden, ornamental border, or kitchen garden. Lemon verbena grows well in containers—either mixed with other plants or as a single specimen—or trained into a standard.

Lemon verbena grows best in fairly rich and moderately moist, well-drained soil in full sun. The roots often survive when air temperatures reach 20 degrees or lower if heavily mulched and grown in a protected area. Where winters are cold, grow the plant in a large pot and bring it indoors for the winter.

Use fresh or dried leaves in bath sachets, potpourri, iced drinks, and in any recipe to add a touch of lemon flavor.

**LEMON GRASS** (*Cymbopogon citratus*, Zones 9–11, 12–1) produces a dense tuft of green to bluish-green, rather coarse, grasslike leaves. Native to India and naturalized widely in subtropical regions, this three- to five-foot tender perennial offers a graceful fountainlike shape to the herb, vegetable, or ornamental garden. Use it to frame path edges, mixed in the border for architectural impact, or featured in containers.

Lemon grass thrives in full sun and rich, well-drained soil with ample moisture during the growing season. It will overwinter outdoors in near frost-free regions, or can be grown as an annual or container plant elsewhere. Begin harvesting stems when they are a half-inch thick near the base.

Leaves can be used fresh or dried. Add leaf buds and chopped stems to potpourri, steep in black tea as a refreshing facial tonic for oily skin, or use to make teas or to spice up lemonade. Tender leaves and slices of the basal portion of the stems are best for adding to stir-fries, curries, and other Asian-inspired dishes.
LEMON BALM (*Melissa officinalis*, Zones 4–9, 11–1) is grown mainly for its heart-shaped leaves, which add an attractive textural element to a kitchen garden, front of the border, path edges, or mixed container planting. A clump-forming, hardy perennial growing two to three feet in height, it bears unimpressive white to pale yellow flowers in summer. A few striking variegated cultivars are available, including ‘Aurea’ and ‘All Gold’ with golden-yellow foliage, and ‘Variegata’, with green leaves splashed in bright yellow. I like to grow it along a path, where it releases its scent as I brush past.

It grows in average, moist soil in full sun to part shade. While this mint-family member is somewhat behaved in my garden, it can be quite prolific and self-sow at will. Remove flowers (which are very attractive to honeybees) before they set seed to prevent unwanted spread. A regular shearing will keep the plant more compact and attractive.

Young, tender leaves are best fresh, but can also be dried for later use. Leaves can be added to potpourri and sachets, used in wine-making and liqueurs, or steeped into a refreshing facial toner. Leaves have a delicate, somewhat flowery lemon flavor and can be brewed to make a tasty hot or cold tea, or added to marinades, soups, fruit salads, and vegetables.

**LEMON THYME** (*Thymus × citriodorum*, Zones 5–9, 9–1) has a strong lemon scent and flavor somewhat reminiscent of lemon-pepper seasoning. Spreading, low-mounding, or erect subshrubs grow four to 12 inches high, depending on the variety. Glossy leaves can be lime- to dark-green, sometimes marbled or splashed with silver, gold, or cream. Lavender-pink to white summer flowers appeal to a variety of beneficial insects. It is great as a border plant, small-space groundcover, in a rock or container garden, or mingled in a kitchen or herb garden.

Lemon thyme grows best in a free draining, moderately moist soil, but will tolerate clay soil that has been amended with organic matter. Grow it in full sun or part shade where summers are hot. Shear or cut back plants lightly after flowering to keep them bushy and productive.

Leaves and flowering tips can be used fresh or dried. Use several flowering sprigs to repel moths from linens, or crush fresh leaves and rub them on your skin as an effective mosquito repellent.

Sprinkle fresh or dried leaves over soups, grilled chicken or fish, baked potatoes, salads, or sautéed vegetables.

**LEMON BASIL** (*Ocimum × citriodorum*, Zones 0–0, 11–1) differs from sweet basil in several ways: the plant is more delicate and petite in appearance, it resents being transplanted, stems are softer, and leaves are redolent with the essence of lemon and fresh basil.

A frost-sensitive annual growing one to three feet tall, lemon basil can be planted in the herb or kitchen garden, in a container, or anywhere you can brush against the plant to release its fragrance. A couple of lemon-scented cultivars are available: ‘Sweet Dani’ has a rounded growth habit; ‘Mrs. Burns’, a cultivar of *O. basilicum*, is more robust and bears larger leaves.

Basil is best seeded right in place after all danger of frost has passed and soil has warmed to 50 degrees. It thrives when grown in a sunny location in rich, moderately moist, well-drained soil. Pinch out flower spikes as they form to prolong leaf production.

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**Sources**


*Territorial Seed Co.*, Cottage Grove, OR. (800) 626-0866. [www.territorial-seed.com](http://www.territorial-seed.com). Catalog free.
Add fresh or dried leaves to soups, stews, stir-fries, casseroles, baked goods, chicken and fish dishes. Fresh leaves add zest to iced beverages and hot teas, or can be used to make herbal vinegar or an especially tasty pesto.

LEMON-SCENTED GERANIUMS  
(*Pelargonium crispum, P. citronellum*, etc., Zones 10–11, 11–1) vary in bloom color, leaf form, and growth habit. Some are sprawling or trailing plants, others are large robust specimens such as ‘Mabel Grey’, which grows to six feet in height. Regardless of size, all are deer-resistant, drought-tolerant tender perennials that provide a welcome alternative to more common annuals such as petunias and marigolds. With such a diversity of plant forms, there are a multitude of ways to use them in the garden: as a specimen plant or trained as a standard; as edging plants; cascading over a rock or wall; in an herb garden or annual flower bed; or in hanging baskets, window boxes, or decorative pots.

Grow these African natives as perennials in frost-free regions, or as annuals where winters are cold. Plants thrive in a sunny, well-drained, slightly dry soil amended with plenty of organic matter.

Provide some shade during the heat of the day where summers are especially hot. Pinch stems occasionally throughout the growing season to encourage branching and shapelier plants.

Use the dried leaves and flowers of scented geraniums in potpourri and sachets or in crafts, such as pressed flower cards. Float fresh leaves and flowers in fingerbowls, or bury a few leaves in a container of sugar to infuse it with a hint of lemon flavor. Fresh leaves are more fragrant and attractive than flavorful but can be used in teas and iced drinks, homemade ice cream, herbal butters, jams, cookies, and cakes.

DESIGN IDEAS FOR A LEMON-SCENTED GARDEN

- Lay out a cartwheel design with bricks to separate the beds. Plant lemon verbena in the center, with alternating beds of lemon grass and lemon balm planted within the inner spokes. Border the outer circle with lemon basil, lemon thyme, and lemon-scented geranium.
- Design a keyhole-shaped bed, with a path planted with alternating blocks of various lemon thymes leading to a bench. Frame the back of the bench with a raised bed of lemon balm or lemon mint and place a potted lemon verbena on each side. Build two quarter-circle raised beds on opposite sides of the path and in front of the bench and plant with lemon grass.
- Assemble a grouping of decorative pots planted with lemon-scented herbs on the deck or patio. Or feature a containerized garden of lemon-scented herbs by your front entry. Grow lemon verbena and lemon grass in large pots; lemon balm in medium pots, several small pots of lemon basil staggered at various heights; lemon mint and lemon thyme in window boxes; and a trailing lemon-scented geranium spilling out of a hanging basket.
- Grow lemon-scented herbs in a bed designed in any shape, and fill in with sunny annual flowers such as dwarf sunflowers, zinnias, and ‘Lemon Gem’ marigolds.

—K.W.
LEMON MINT (Monarda citriodora, Zones 5–9, 10–2) is a hardy annual or short-lived perennial native to the Midwest and southern United States. Also known as lemon bergamot or lemon bee-balm, these aromatic plants grow 12 to 30 inches tall and have lance-shaped, distinctly lemon-scented leaves with hints of mint. Whorls of showy lavender to white summer flowers offer double attraction—the blooms attract butterflies and hummingbirds, and the calyxes that remain after the small flower petals fall are quite striking. They make a pleasing addition to hummingbird or butterfly gardens, cottage gardens, herb gardens, or wildflower areas.

Freelance writer Kris Wetherbee and her husband, Rick, grow lemony herbs in their garden in Oakland, Oregon.

**Lemon Balm Almond Muffins**  
*Makes 1 dozen*

1 cup unbleached flour  
1 cup rolled oats  
3/4 cup almond meal*  
1 1/3 cup brown sugar  
1 teaspoon baking soda  
1/2 teaspoon baking powder  
1/2 teaspoon salt  
1 tablespoon fresh chopped lemon balm (or 1 teaspoon dried)  
1 egg  
1/4 cup almond oil  
1/4 teaspoon almond extract

1/3 cup plain yogurt  
3/4 cup buttermilk  
(optional) 1 tablespoon slivered almonds for garnish

Glaze for muffins:  
2 tablespoons lemon juice  
2 tablespoons honey  
2 tablespoons apricot preserves

* To make almond meal, grind raw almonds in a food processor just until finely ground but before it turns into a nut butter.

Preheat the oven to 350 degrees F. In a large bowl, mix together the dry ingredients from the flour to the salt. Stir in the lemon balm.

In a small bowl, whisk the egg, almond oil, and almond extract until blended. Stir in the yogurt and buttermilk. Add the wet mixture to the dry mixture, stirring just until moist and combined.

Spoon the batter into 12 muffin cups coated with cooking spray. Sprinkle almond slivers evenly over the top of each muffin cup and press gently with the back of a spoon to make contact with the batter. Bake at 350 degrees F for 20 minutes or until a wooden pick inserted in the center comes out clean. Meanwhile, stir the glaze ingredients together in a separate bowl. Remove the muffins from the pan and cool on a wire rack. Immediately after removing the muffins, brush the tops of each with the glaze.

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**Apple Fig Salad with Lemon Verbena Riesling Dressing**  
*Makes 4 to 6 servings*

2 to 3 tablespoons chopped fresh lemon verbena  
1/2 cup Riesling wine  
1 tablespoon honey  
1/2 cinnamon stick  
3 cups chopped apples, such as Fuji (about 2 large apples)  
2 cups chopped mandarins (such as Satsuma) or oranges  
8 sliced figs (fresh or dried)  
1/2 cup coarsely chopped pecans

In a small saucepan, combine lemon verbena, wine, honey, and cinnamon stick. Bring to a boil, reduce heat, and simmer, covered for five minutes. Remove from heat and let cool.

Meanwhile, prepare fruit and combine in a large serving bowl. Add chopped pecans and dressing, then gently toss to coat fruit. Serve chilled.

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* Freelance writer Kris Wetherbee and her husband, Rick, grow lemony herbs in their garden in Oakland, Oregon.
BELEAGUERED BEES
In addition to everyday pests and diseases, the honeybee industry has a new threat to deal with, known as colony collapse disorder (CCD). First reported along the East Coast in fall 2006, CCD has since afflicted hives in 24 states across the country. Similar occurrences have been observed in Spain and Poland.

CCD is characterized by hives with a sudden lack of adult bees without any sign of the dead insects, and slow invasion by common pests. Unlike past colony losses, this disorder differs in that bees fail to return to the hive—a characteristic that is highly unusual for these insects—and colony decline is rapid, with bees disappearing in large quantities, sometimes literally overnight.

The cause of CCD is unknown; however, scientists suspect a variety of factors may play a role in the decline, including accumulated stress from transporting bees long distances, viral diseases, a fungus, parasitic mites, and insecticides. High bacteria levels, viruses, and fungi have been observed in the guts of recovered dead bees, causing researchers to speculate the afflicted bees’ immune systems are being compromised.

With the monetary value of commercial honeybees estimated to be $15 billion annually, CCD could have a dramatic effect on certain sectors of agriculture. “Every third bite we consume in our diet is dependent on a honeybee to pollinate that food,” says Zac Browning, vice president of the American Beekeeping Federation. Farmers are 90 to 100 percent dependent on honeybee pollination for crops such as almonds, avocados, blueberries, cranberries, cherries, asparagus, broccoli, celery, pumpkins, squash, and sunflowers.

For more information on CCD, please visit the Mid-Atlantic Apiculture website at http://maarec.cas.psu.edu/ ColonyCollapseDisorder.html.

COURT ORDERS MORE FEDERAL OVERSIGHT ON TRANSGENIC CROPS
In early February, the Federal District Court ordered that the United States Department of Agriculture (USDA) more thoroughly review requests to plant test plots of genetically engineered crops.

While this ruling comes in the wake of controversies surrounding transgenic alfalfa, rice, and sugar cane, it actually resulted from the discovery in 2004 that a genetically engineered grass had escaped a 400-acre test plot in Oregon and had crossed with wild plants of the same species up to 13 miles away.

In partnership with Monsanto, a major biotechnology and agribusiness firm, the Scotts Miracle-Gro Company developed a genetically engineered creeping bentgrass (Agrostis stolonifera) that resists glyphosate, the major ingredient in Monsanto’s herbicide Roundup®. Environmental groups and federal agencies have voiced concerns that a “superweed” could result from the development of an herbicide-resistant grass that can cross easily with other grasses.

The testing of the bentgrass also called into question the assessment procedure the USDA Animal and Plant Health Inspection Service (APHIS) uses to grant permits for testing genetically modified plants.

In the case brought by the International Center for Technology Assessment, the Center for Food Safety, and other plaintiffs, the judge found that the USDA had violated the National Environmental Policy Act (NEPA). This regulation requires that the USDA take certain steps to determine the environmental risk of field testing genetically engineered crops, and there was no documentation showing it had done so before granting permits for Scotts to test approximately 2,000 acres of its bentgrass in Oregon, Idaho, and Virginia.

As a result of the judge’s ruling, “the USDA will have to look at the impact of
all bioengineered crops instead of just wholesale excluding them from assessment, as they have had a pattern of doing,” explains George Kimbrell, staff attorney for the Center for Food Safety. “This will mean that the permitting process should take longer, and going forward, these field tests can be challenged if the USDA doesn’t comply with NEPA.”

**RACHEL CARSON CENTENNIAL**
May 27, 2007, marks the 100th birthday of the late author and ecologist Rachel Carson, widely credited with launching the modern environmental movement with her 1962 book, *Silent Spring*. Though Carson died in 1964 of breast cancer, her efforts to raise public awareness of environmental issues still resonate today. To commemorate the centennial of Carson’s birth, several events and activities are taking place throughout the country.

At the Rachel Carson Homestead in Springdale, Pennsylvania, a year-long celebration will include the “Rachel Carson Birthday Celebration & Sustainable Feast” on May 27. The Homestead is also featuring the Legacy Challenge “to make permanent, measurable changes in behavior and policies that promote Rachel Carson’s environmental ethic.” Anyone can make pledges to “reduce their environmental footprint” by going to www.rachelcarsonhomestead.org.

On May 19, the Rachel Carson Council is holding an open house at the Silver Spring, Maryland, home in which Rachel Carson lived for more than three decades and where she wrote *Silent Spring*. The organization encourages everyone to pledge to make May 27 a “pesticide-free” day.

The Newton Marasco Foundation is celebrating Carson’s centennial by sponsoring presentations of “A Sense of Wonder,” a one-woman play about Carson’s life. They are also working with federal, state, and local governments to officially declare May 27 Rachel Carson Day. Visit www.newtonmarascofoundation.org for more information.

The Friends of the Fish and Wildlife Service National Conservation Training Center have started a book club in honor of the centennial. During 2007, they will discuss books by and about Rachel Carson. Go to http://rcbookclub.blogspot.com to join in.

**CONNECTING KIDS WITH NATURE**
In an effort to get youngsters to tune into green rather than a screen, the National Wildlife Federation (NWF) has launched the Green Hour™ program, designed to encourage children to experience at least one hour a day that would include “unstructured play and interaction with the natural world.”

On www.greenhour.org, the NWF provides ideas for parents and children to explore and enjoy nature, with new activity suggestions appearing weekly. Some of the recommended backyard activities include adopting a tree, putting up a feeder and identifying the birds that come to visit, and going on a scavenger hunt for feathers, spider webs, bird nests, acorns, and other natural treasures. There is also a blog and a “Community Corner” where participants can share comments, questions, and ideas.

**ENDANGERED SPECIES DAY**
In support of threatened, rare, and endangered plants and animals, last year the U.S. Senate designated May 11, 2006 Endangered Species Day. With encouragement from numerous conservation groups, the Senate recently passed a resolution to declare May 18, 2007, as the second annual Endangered Species Day.

“Many species are struggling,” says Mark Rockwell, the Endangered Species Coalition State Organizer for California. “Raising awareness is critical to the protection process.”

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Numerous organizations will host events to emphasize the importance of protecting and preserving threatened species. These will include lectures and seminars at the Zoological Society of San Diego's Center for Conservation and Research for Endangered Species (CRES), the largest zoo multidisciplinary research team in the world. The New England Wild Flower Society in Framingham and Arnold Arboretum in Boston, Massachusetts, also plan to host events.

For more information, visit the Endangered Species Coalition website at www.stopextinction.org.

**GRANTS FOR HORTICULTURAL RESEARCH**

The Horticultural Research Institute (HRI) has awarded $350,000 to fund 24 research projects and four scholarships for 2007. Chosen by the HRI Executive Committee from a collection of more than 100 applications, projects were granted based on their potential to solve industry-related problems and offer new techniques to the field.

The grants include a $30,000 award to Harold Pellett of the Landscape Plant Development Center in Minnesota for his project, “Development of New Landscape Plants for all Regions of North America,” and a $25,000 grant to Pierluigi Bonello and Daniel A. Herms from Ohio State University for their work on “Molecular Biology of Ash Resistance to the Emerald Ash Borer.” Robert D. Wright from Virginia Polytechnic Institute and State University was awarded $15,000 for an experiment investigating the use of pine chips as a container medium for nursery crops.

A division of the American Nursery & Landscape Association, HRI has awarded more than $4 million of industry funds to approximately 600 research projects since 1963. For additional information, visit www.anla.org/research.

**STAMP OF APPROVAL FOR POLLINATORS**

This summer, the United States Postal Service is releasing four new stamps in recognition of the insects, birds, bats, and other animals that pollinate the world’s food and ornamental plants. These new stamps depict four pollinators and four wildflowers in an interlocking design that emphasizes the ecological relationship between pollinators and plants and suggests the biodiversity necessary to ensure the viability of that relationship.

The stamps feature two Morrison’s bumblebees with purple nightshade (Solanum sancti); a calliope hummingbird with a hummingbird trumpet blossom (Epilobium canum, syn. Zauschneria cana); a lesser long-nosed bat and a saguaro flower (Carnegiea gigantea); and a southern dogface butterfly on prairie ironweed (Vernonia fasciculata). This set of four new stamps featuring pollinators will be available this summer.

**A BLOOMIN’ CHANGE**

Gardeners can help track the effects of climate change by participating in Project Budburst, sponsored by the National Phenology Network, an organization designed to compile “phenological data to support global change research.”

Project Budburst is a national campaign that encourages members of the public to monitor certain events in their natural surroundings. Participants choose from a list of 54 trees, shrubs, and ornamental plants and then track the leafing and flowering times of an individual plant through June 15. After compiling the data, scientists will compare the results to historical records in an effort to track the effects of climate change on plants.

With the contribution of the public, scientists hope to monitor longer-term changes in our natural environment. Visit the Project Budburst website at www.windows.ucar.edu/citizen_science/budburst to learn how you can participate.

Written by Assistant Editor Viveka Neveln and Editorial Intern Courtney Capstack.
A

n influx of students swarmed the Michigan State University campus March 29 to April 1, not because of a mid-semester attendance spike or to attend a March Madness basketball game, but for a chance to network and win a prestigious title at the largest national recruiting event and student competition in the green industry. This year, more than 900 university students from 53 schools across the country participated in Student Career Days (SCD), sponsored by the Professional Landcare Network (PLANET). Offering a collection of informative workshops, presentations led by noted industry professionals, behind-the-scenes tours of local attractions, a bustling career fair, and a variety of individual and team competitions, it is no wonder SCD attracts hundreds of students and professionals every year.

“This event is just dynamic,” says PLANET President Jim Martin. “There’s across-the-board industry appreciation, from students and companies to the service provider community. It’s one of PLANET’s most successful, broadly participated events of the year.”

HUMBLE BEGINNINGS
No one dreamed that SCD would blossom into the leading attraction it is today when less than 200 students and 18 industry representatives attended the inaugural event, held at Mississippi State University in 1977. Originally sponsored by the Associated Landscape Contractors of America—which merged with the Professional Lawn Care Association under the name PLANET in 2005—the event debuted as a friendly competition between five colleges: Ohio State, Texas Tech, Georgia Tech, Milwaukee Area Technical College, and Mississippi State. But the attendance doubled in the second year, and many representationists began to view the event as a valuable recruiting opportunity.

“We firmly believe one of PLANET’s most important missions is to advance educational opportunities,” says Martin. “Without a dynamic and healthy top tier group of students entering the green industry, our profession would fall back. Our job is to make sure young people entering the work force know about this terrific career path and inspire those entering the field.”

THE COMPETITIVE EDGE
More than 80 green industry companies attended this year’s event, which provided “educational sessions, networking opportunities, and competitive events that are directly related to the skills necessary for a career in the green industry,” says Jennifer Buck, SCD committee chair and a former student participant.

As a recruiting director for Chapel Valley Landscape Company in Maryland, Buck also sees the event as a valuable chance for seeking potential employees. “SCD helps me to accomplish my professional goal of finding qualified employees and interns,” says Buck, “and it allows me to build my personal relationships with fellow industry members.”

In addition to commercial landscape firms, some non-profit organizations are finding SCD a valuable place to meet prospective interns and employees. American Horticultural Society (AHS) staff members have attended the event for the last two years. “SCD is an important opportunity to both interact with students about to enter the workforce, and to establish a growing dialog with the faculty and students who can benefit from the many resources and programs that we offer,” says AHS Ed-

WHAT’S PLANET?
The Professional Landcare Network (PLANET) is an international association supporting “lawn care professionals, landscape management contractors, design/build/installation professionals, and interior plantscapers.” PLANET supports more than 4,000 member firms from all aspects of the green industry. Bearing the slogan “We Are the Voice of the Green Industry,” it hosts a variety of programs, shows, and certification courses annually. Other upcoming events include a Summer Leadership Meeting June 20 in Ontario, Canada, a Specialty Symposium in Indiana that gives personnel an inside look at running a green industry business, and a Green Industry Conference and Expo in Louisville, Kentucky. To learn more about PLANET and how to get involved, visit www.landcarenetwork.org.
ucation Programs Manager Stephanie Jutila, who attended this year’s event.

TESTING THE BEST
This year, students competed in 24 individual and team contests in various categories ranging from personnel management, exterior and interior design, and irrigation troubleshooting, to wood construction, equipment operation, and tree climbing. With the help of contest descriptions, study guides, and identification lists posted on the PLANET website, students often prepare for hours before their competition.

“I attended for three consecutive years and learned something new each time,” says Sonya Lepper Westervelt, a former student competitor from Virginia Tech. “This event gave me the opportunity to visit new places, make professional contacts, and compete in specialty areas, all of which positively influenced my knowledge of the green industry.”

Stephanie Lavoie, a four-year competitor from Kansas State University, says “SCD events were all valuable, and I can attribute my career to attending PLAN- ET.” Lavoie currently works for Valley Crest Companies in Dallas, Texas, one of many landscaping firms represented at the event.

Landscape architect and Associate Professor Robert McDuffie, who has led students from Virginia Tech in Blacksburg to SCD for 10 of the past 12 years, also finds the event a worthwhile venture for his students. “Mingling with 800 other students from around the country has an eye-opening effect. The students see that the field of landscape contracting is actually pretty diverse, with a growing level of professionalism,” says McDuffie. “Companies from all over come to put their best foot forward in hopes of finding their next best employee.”

A different university hosts SCD each year. Michigan State University in Lansing is scheduled to host next year’s competition, followed by North Metro Tech of Atlanta, Georgia, in 2008, and Cal Poly Institute of Pomona, California, in 2009. “SCD is a premier annual opportunity to see how great the industry is and to see students competing in their new career choice,” says Martin. “I’m not sure there’s another event like it in any other industry.”

For more information about the SCD, visit www.studentcareerdays.org.

Courtney Capstack is an editorial intern for The American Gardener.
ONE ON ONE WITH...

Roger Swain: TV Personality, Author, Environmentalist

Doreen Howard: Many people know you as the former host of *The Victory Garden*. What was it like making a gardening show for television?

**Roger Swain:** We did 500 episodes, each shot in a half day or less, which could be demanding. I’ve had doctors who watched the show tell me they could help me with my asthma because sometimes I’d be so out of breath—except I don’t have asthma! They’ve never tried planting a garden and talking to a TV camera at the same time.

Producing an outdoor program in an urban location presented its own set of challenges. When it wasn’t raining or freezing cold while we were filming, the UPS truck might pull up in the background or the first carrot I pulled out of the ground might be forked.

You're famous for your red suspenders. How did you come up with them?

**Roger Swain:** They keep my pants up! People think I wear them only for TV, but I’ve been wearing them since Elisabeth gave me a pair shortly after we met 30 years ago.

When did you become interested in gardening?

**Roger Swain:** I started a backyard vegetable garden as a form of teenage rebellion. Later, I took a lot of botany courses in college. I always enjoyed writing essays, which is how I ended up as science editor at *Horticulture* magazine.

You’ve written extensively about how everything we do as gardeners affects our planet. How does gardening help us understand the natural world?

**Roger Swain:** What we do in our gardens does make a difference. Gardeners have always had their fingers on the pulse of nature. Take global warming, for example. Longtime gardeners know the climate is changing when they see lilacs budding out earlier than usual or they find they can begin planting peas weeks before they used to.

But gardeners can also lose touch with nature. Fifty years ago, for instance, it was considered highly desirable for suburban lawns to contain clover; it was included as part of grass seed mixes. Why is it now considered a weed?

When the first broadleaf herbicide [2,4-D] was introduced to the American public in the 1940s, the fact that it killed clover was considered a defect. But some people saw a marketing opportunity for the product—provided the broadleaf clover could be reclassified as a weed. And so—to paraphrase from the Bible—it came to pass.

I tell gardeners it’s okay to leave clover in your lawn; it fixes nitrogen in the soil to feed the grass and attracts pollinators for other plants. It’s also okay not to water lawns and to mow them less often. Lawns can take care of themselves and thrive. We just have to realize that a perfect swath of green is neither feasible—without extraordinary use of labor and chemicals—nor healthy.

How are you keeping in touch with what’s going on in American gardening?

I began my career as a public lecturer, and I’m still touring every year from Feb-
ruary to May speaking at flower shows and other horticultural gatherings. I enjoy lecturing, and I love a good audience. I hunger for the questions I’ve never been asked.

When I’m not lecturing, I’m gardening more than ever before to keep myself honest when I talk about it.

Could you describe your home garden? Many of my colleagues joke, “If you can’t eat it, Roger won’t grow it.” Actually, we grow all sorts of ornamental plants in our garden, but we do raise about a quarter of our food and give away a heck of a lot.

Elisabeth and I are trying to recapture pomology as it was before the Civil War, when we were a nation of fruit growers. In addition to our vegetables, we specialize in small fruits from brambles to blueberries to grapes and have several dozen kinds of tree fruits as well.

In your role as a garden communicator, what is the single most important thing you want to convey to your readers and audience?

To get to the true essence of gardening, we have to get back to growing food plants; they’re the reason gardens were invented in the first place. The absence of anything edible in so many American landscapes these days can only be viewed as people missing out on the total gardening experience.

What’s the most rewarding part of what you do?

Meeting people and putting a face on gardens and food. There are plants and places, but they don’t make a garden. It’s not a garden unless people are involved.

Doreen Howard, former garden editor at Woman’s Day, gardens in Roscoe, Illinois.
HOVELS, SPADES, and forks are long-handled garden tools designed for digging, lifting, and moving soil and other material. They have been around for centuries, with few changes in design. If your garden is larger than a window box, you will need them for soil preparation, transplanting, bed construction, edging, spreading soil amendments, moving mulch, and lots of other garden maintenance tasks.

The job at hand as well as the material with which you are working—soil, sand, compost, gravel, garden litter, mulch, plants—will determine which tool to use.

A BLADE OF DIFFERENCE
Shovels and spades are similar in that they both have solid blades attached to a straight handle. The major difference is in the shape of the blade. A shovel’s is scooped with a rounded, tapered, or pointed edge. It is thinnest at the tip so it can penetrate the soil more easily. Its scooped surface helps contain loose or granular material so it can be lifted without spilling. The blade of a spade is flat, with a squared edge that makes clean, straight, and if necessary, deep cuts. There is usually a slight angle or bend between the blade and handle of a spade, while there is typically little or no angle between the handle and blade of a spade.

Shovels and spades often have a rolled step at the shaft end of the blade. This is an important feature to look for if you plan to dig in heavy soil because it allows you to apply pressure with your foot as you dig, which puts considerably less strain on your back and upper body.

SIZE MATTERS
Obtaining maximum efficiency with these tools requires the right size and shape of the blade for the job and a handle length that is comfortable. Shovels and spades with narrow blades are useful for working in tight spaces or for constructing trenches.

Broad, scooped shovel blades are great for moving sand, gravel, and soil. Long bladed spades—sometimes called tree spades—are useful for transplanting trees and shrubs and digging deep planting holes.

The Canadian Center for Occupational Health and Safety (CCOHS) suggests that longer handles provide more leverage and ease the strain on back muscles, but shorter lengths result in improved efficiency. And D-shaped handles allow you to apply more force from above. The bottom line: Go with the length that is most comfortable for you and most efficient for the job you are tackling.

Clean Air Gardening has a petite 22-inch-long perennial spade with a sturdy, four-and-a-half-inch blade that I like for digging and dividing closely spaced perennials. Its T-grip handle adds control.

At 40 inches in length, Rittenhouse’s stainless steel garden spade with its D-grip handle is suitable for tackling big jobs. Its stainless steel shaft extends 22 inches onto the handle section for added strength—you can lean back without fear of breaking it.

You can put some teeth into your digging—literally—with the Super Shovel from Gardener’s Supply. Its high-carbon steel blade is tipped with sharp teeth that...
can challenge even hard, packed clay. And its reinforced fiberglass handle is both strong and shock absorbent.

**Tine After Tine**

Like shovels and spades, garden forks are used for digging, mixing, lifting, tossing, and working the soil. The business end of a garden fork consists of several sharply pointed tines that are usually slightly curved to create an angle with the handle to facilitate lifting and tossing coarse material such as manure, straw, or compost.

There are several types of forks. The border fork has flat tines, and is primarily used for digging and working the soil. It penetrates soil more easily than a spade and causes less root damage. Its lighter weight accommodates smaller gardeners. Two forks can be used to divide densely rooted perennials by inserting them back to back into a clump and pulling the forks apart. The digging fork is used for the same purposes, but it has longer tines, so it penetrates deeper. Either can be used for harvesting root vegetables; they are sometimes called potato forks. The handles of both border and digging forks often have a D-shaped or T-shaped grip that can significantly add to their comfortable use and control.

A broadfork is a tool that helps aerate soil or loosen it for planting; it can also be used to loosen soil around root vegetables at harvest time. It consists of two parallel handles attached to either end of a flat crossbar that supports a row of short, straight tines. To use a broadfork, step on the crossbar to sink the tines into the soil, then step off and pull back on the handles to an angle of about 45 degrees before pulling it out and repeating the process about six inches behind the first insertion.

A pitchfork generally has a long, straight handle and long, rounded tines with very sharp points; it is the fork of choice for moving compost, straw, mulch, or weeds.

The Unifork is a hybrid between a pitchfork and a shovel. Made in England and distributed in the United States by Union Jack Stable & Garden, its large, scooped blade is constructed of lightweight, high-grade polypropylene. It is highly effective for shoveling mulch and great for turning the compost pile.

Some forks are designed for specific uses. The Peta Easy Grip Long Reach Fork is made of stainless steel, but weighs only 1.2 pounds. Its ergonomic design makes it a good choice for those with limited strength. It is lightweight yet sturdy, the Unifork is a hybrid tool that combines the features of a pitchfork and a shovel, light enough to be used from a wheelchair. Gardening with Ease, which carries Peta Grip products, also offers an arm grip that can be attached to this or any long-handled tool to provide greater leverage and stability.

So with all of the gardening tasks before you this summer, be sure you have the right digging-mixing-lifting-aerating-edging tools at your disposal. They will help you get your jobs done more efficiently—and with less stress.

Rita Pelczar is contributing editor for The American Gardener.
Summarizing the text:

**Encyclopedia of Hardy Plants**


**Summer Snowflake** (*Leucojum aestivum*) ‘Gravetye Giant’ grows wonderfully in my USDA Zone 4 garden, yet a friend who gardens on the border of Zones 5 and 6 can barely keep it alive. Why? In his *Encyclopedia of Hardy Plants*, Derek Fell explains that cold hardiness is influenced by every factor in the garden: wind and light exposure, soil type, precipitation, drainage, pH, and humidity. So when my winter lows reach minus 30 degrees Fahrenheit, my *Leucojum* is safely buried in well-drained soil covered in a thick, insulating blanket of snow. My friend’s grows in clay soil, with little or no snow to protect it, and so is apt to perish at a mere 10 degrees below zero.

To Fell, a hardy plant is one that “can survive severe winters, especially in areas where the ground freezes,” though some of the plants listed in this book are only hardy to Zone 6. The first chapter covers those delightful hardy annuals that may successfully be sown, or allowed to self-sow, in fall. Next come bulbs, herbs, perennials, including some grasses, shrubs, woody vines, and trees suited to growing in a garden. The book ends with a short chapter on vegetables, fruits, and nuts. Each encyclopedia entry gives plant habit, size, cultural needs, propagation, and a brief description, accompanied by one of the author’s fine photographs.

It is enlightening to read that trumpet vine (*Campsis radicans*), which has never thrived for me, should be hardy to Zone 3. This tells me that perhaps I’m not meeting some other cultural need for it, and that I should stop blaming the cold for its demise. To my delight, Fell includes species daylilies, too seldom used in gardens anywhere. However, the book leaves out several of my favorite reliably hardy plants, including *Clematis viticella* cultivars, Preston lilacs (*Syringa xprestoniae*), and the dwarf arctic willow, *Salix purpurea* ‘Nana’.

Gardeners will always quibble about plant hardiness, believing somehow that plants can be tidily classified and made to conform to our human notions. But we cannot know, until we’ve tried them ourselves, which plants will thrive in our gardens. This encyclopedia can save considerable frustration and money by offering us a starting point for our own experimentation.

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**The Organic Lawn Care Manual**


When was the last time you sat down and consciously thought about how your lawn—and the maintenance required to keep it looking pristine—affects the planet? In *The Organic Lawn Care Manual*, Paul Tukey challenges us to ask tough questions about our lawns. Many years ago, Tukey asked himself these same questions and discovered that our current conventional lawn maintenance practices are unsustainable, to say the least.

Tukey provides the necessary background information and suggests good quality methods for achieving the same results he did when he switched to organic lawn care methods. It does not matter if you live in Pensacola, Bangor, or Tacoma, all the information you need for maintaining a healthy and beautiful lawn without synthetic chemicals is here.

When evaluating this book, I set a number of parameters to see if it passed muster, including explaining grass anatomy, plant nutritional requirements, soil basics, lawn installation, lawn renovation, and proper maintenance practices. I also looked for information on lawn grass plant species and alternatives, repair methods, equipment selection, and troubleshooting, including how to deal with pests and diseases. Most importantly though, I checked to make sure that the book contained information on how to improve the health of the soil.

In addition to providing all of this essential information, Tukey goes into depth on some very important points, such as proper watering practices, soil fertility, and soil improvement. I especially liked Tukey’s RILE (relax, identify, listen, eradicate) method for dealing with weeds and other pests. I also enjoyed the success stories from other gardeners sprinkled throughout the book and found the charts and graphs useful. The photographs are well placed, truly illustrating the points Tukey is making in the text.

Both Tukey and I have spent many years in professional turfgrass maintenance. We may use slightly different methods for accomplishing various tasks, but our goals are exactly the same. I highly recommend this book for your lawn’s health, your health, and the health of the planet we all share.

—Don Williamson

Don Williamson has 14 years of experience in golf course maintenance and construction and is the author of many gardening guides, including *Lawns: Natural and Organic* from Lone Pine Publishing (2006).
RICK DARKE’s Encyclopedia of Grasses for Livable Landscapes has, by virtue of the award-winning author’s splendid photographs and its large format, the appearance of a coffeetable book. But it is unlikely to be relegated to the coffee table because the detailed descriptions of ornamental grasses and evocative examples of their use in the landscape offer something for gardeners of all levels of expertise and experience.

The encyclopedic section of this book is an expansion of and update to Darke’s first reference on the topic, The Color Encyclopedia of Ornamental Grasses, published in 1999 by Timber Press. But the scope of this book is far greater, reflecting Darke’s interest in considering grasses and their use in gardens in the larger global context of ecology and sustainability. As Darke notes in the preface, the book “extends far beyond decorative designs and residential gardens to embrace contextual, conservation-based design of shared landscapes.”

The bulk of the book (240 pages) is devoted to the encyclopedic section covering true grasses (Poaceae) as well as the related sedges, rushes, restios, and cattails. Detailed entries discuss each plant’s provenance, cultural needs, and uses in the landscape.

For those who are befuddled by botanical nomenclature, chapter six, “Grass Names & Nomenclature,” will demystify it. Compared to Japanese vernacular names that are “specific and precise,” writes Darke, English-language vernacular names for plants such as various species of Miscanthus, are “neither common nor consistent.” For this reason, one should rely on “the universal precision of the botanical names, which is precisely why they exist.”

A chapter titled “Cultivation & Maintenance” will provide even the most novice grass gardener with the basics of choosing the right plant for, and from, the right place. Here Darke explains the differences between the two broad categories of grasses—cool-season and warm-season—and provides detailed instructions for the care and maintenance of these plants.

For those readers who have dabbled in growing ornamental grasses, the best parts of this book will be chapter three, “The Beauty of Grasses,” and chapter four, “Design with Grasses.” The former illustrates reasons to grow these plants—for their luminosity, their rich textures, and the sound and movement they bring into the garden. The latter shows examples of outstanding designs. These designs, from around the country and around the world, suggest ways for gardeners in all climates to place and mix ornamental grasses successfully with other plants in gardens and landscapes.

—Carole Ottesen

A contributing writer for The American Gardener, Carole Ottesen is the author of several gardening books, including Ornamental Grasses: The Amber Wave. She gardens in Potomac, Maryland, and Cape Breton, Nova Scotia.
HAVING LIVED in disparate locales such as the Midwest and the Mediterranean, I know that the plants one can grow and the type of care needed to grow them can vary tremendously depending on where you live. Part of the adventure of moving to a new region is getting to know new plants and adapting to different climates and soil types. Reading good regional gardening books is one way I have discovered to ease the transition. These often become references I return to again and again, even after I’ve become more comfortable with my new area. For some gardening guidance tailored to your neck of the woods, here are some recently published books that focus on various regions and states in America.

This year, the Globe Pequot Press is coming out with a line of Gardener’s Companion books that focus on individual states. For gardeners in New England, there’s one for New Hampshire, written by Henry Homeyer, and one for Massachusetts by Barbara Gee. There’s also one for Colorado by Jodi Torpey. Upcoming editions will include Michigan, Missouri, Montana, and Virginia. Retailing for $14.95, each book covers the state’s soil conditions, plants that thrive in the climate, regionally specific plant-care tips, and how to make the most of the growing season. They also include a list of useful resources such as gardening books and organizations, information about local Master Gardener programs, and sources of seeds, tools, and other supplies.

Cool Springs Press, which focuses on regional gardening books, has a couple of new titles in its Month-By-Month™ series. Its latest one is Gardening in Alabama & Mississippi by Bob Polomski, published this year. In 2006, it published Gardening in Washington & Oregon by Mary Robson with Christina Pfeiffer. Cool Springs also has released several revised editions for Louisiana, Georgia, Minnesota, Wisconsin, Indiana, and Pennsylvania. Priced at $24.99, these user-friendly books provide a monthly guide for working with various plant categories including annuals, bulbs, roses, trees, and vegetables. For each of these, the book discusses tasks such as planting, watering, fertilizing, and dealing with pests, and gives other helpful hints for achieving a successful garden.

Rocky Mountain gardeners will enjoy Gardening With Altitude: Cultivating a New Western Style. published in 2006 by Denver Botanic Gardens (DBG) and written by several of its staff members. Using DBG as an example, “this book contains not only techniques,” explains DBG Public Relations Manager Holly Shrewsbury, who edited the book, “but ways of thinking about how your own garden can be in harmony with nature in a semi-arid, high-altitude environment—celebrating, not fighting, this region’s climate and growing conditions.” Color photographs by Scott Dressel-Martin illustrate almost every one of the book’s 168 pages, presenting a tantalizing glimpse of the region’s vibrant flora and landscapes.

Heading further west, Designing California Native Gardens by Glenn Keator and Alrie Middlebrook (University of California Press, 2007, $27.50) takes a “plant community approach to artful, ecological gardens.” The book’s 12 chapters deal with different native plant communities that offer the most potential for garden use, ranging from redwood forests and mountain wildflowers to chaparral and wetlands. The authors provide a plan (both as a color rendering and a line drawing) to incorporate species from each particular naturally occurring plant community into a well-designed garden. For example, the book explains how to create a meadow garden with grasses, perennials, groundcovers, and bulbs that grow wild on California’s mountains. Color photographs accompany many of the plant descriptions and depict the great diversity of California’s landscapes.

For those with an interest in tropicals, there’s A Tropical Garden Flora by George W. Staples and Derral R. Herbst ( Bishop Museum Press, 2006, $59.95). This monumental reference, weighing in at approximately 900 pages, contains more than 2,100 species of “plants cultivated in the Hawaiian Islands and other tropical places.” Designed with both scientists and gardeners in mind, the book includes a section on general horticultural information relevant to gardening in Hawaii, such as propagation techniques for tropical species. Additionally, the authors made an effort to “minimize technical terminology in favor of plant descriptions and keys that use simple English.” The book is further enhanced with hundreds of line drawing and more than 80 color photographs.

—Viveka Neveln, Assistant Editor
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Regional Public Gardens Highlighted in U.S. Botanic Garden Exhibit

TWELVE PUBLIC GARDENS around the country will converge in Washington, D.C., from May 26 through October 8 at the U.S. Botanic Garden (USBG) in “A Sense of Place: Public Gardens Across America.” This exhibit will showcase “the way public gardens contribute to communities and national initiatives—for example, conservation,” says Christine Flanagan, public programs manager at the USBG. “It will hopefully give the public a better understanding of how varied and vital the gardens are to the community and larger world.”

Many of the featured gardens have also been working with the USBG Education Department to provide classes that highlight characteristics of each specific garden display. For example, Denver Botanic Gardens, one of the featured gardens, will exhibit nine different garden troughs to highlight the diverse ecosystems of Colorado. They also plan to offer a class on how to make your own garden trough. Other classes will include an informational presentation on Japanese gardens by the Japanese Garden Society of Oregon, and the North Carolina Botanical Garden will explore three habitats of carnivorous plant bogs.

“This exhibit is a nice overview of the work of public gardens relating to aesthetics, conservation, and other areas,” says USBG Conservation Horticulturist Ray Mims. “Besides informing the general public, we hope it will raise awareness among our leaders and policy makers.”

An additional exhibit featuring a broad overview of public gardens and how they contribute to society and our future will be featured in the USBG National Garden. For more information, call (202) 225-8333 or visit www.usbg.gov.

—Courtney Capstack, Editorial Intern


NORTH CENTRAL
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Looking ahead


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The World’s A-Buzz for Pollinators

FROM JUNE 24 to 30, explore the productive world of pollinators during the first annual International Pollinator Week. Sponsored by the Pollinator Partnership™, a project of the North American Pollinator Protection Campaign (NAPPC), various events around the world will celebrate pollinators and their vital contributions to our natural world.

On June 26, the U.S. Postal Service will hold a First Day of Issue Ceremony for the Pollination stamp series in Washington, D.C. Iowa State University will host the 9th International Pollination Symposium on plant–pollinator relationships, the Sherburne County History Center in Minnesota plans to unveil their pollinator exhibit, and an open house will be held at the United States Department of Agriculture Bee Laboratory in Beltsville, Maryland. Other celebrations include events at the Arizona Sonora Desert Garden in Tucson, Arizona, workshops and lectures at the Rio Grande Botanic Garden in Albuquerque, New Mexico, and a “Pollinator Day: The Impact of the Individual” festival in Macon County, North Carolina.

Paul Growald, chairman of the board and founder of the Coevolution Institute (the coordinator of NAPPC), says his main goal for International Pollinator Week is “For one in 10 people in North America to know what pollinators are, why they are important to us, and have some idea of how they can help them.”

For a listing of events in your region, visit the Pollinator Partnership website at www.pollinator.org or call (415) 362-1137.

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

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

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

### Pronunciations and Planting Zones

**A–L**

- **Ageratum houstonianum** ah-jair-AY-tum hews-toh-nee-AN-um (USDA 10–11, AHS 12–1)
- **Aloysia triphylla** uh-LOY-zee-uh try-FIL-luh (8–11, 12–8)
- **Andropogon gerardii** an-dro-PO-gon jeh-RAR-dee-eye (2–7, 7–1)
- **Antirrhinum majus** an-tihr-RYE-num MAY-juss (7–9, 9–1)
- **Arundo donax** ah-RUN-doh DOH-naks (6–11, 12–1)
- **Aster dumosus** ASS-ter dew-MO-sus (4–8, 8–1)
- **Astilbe xarendii** uh-STILL-bee ah-RENZ-ee-eye (3–8, 8–1)
- **A. chinensis var. pumila** A. chy-NEN-sis var. PYEW-mih-luh (0–0, 12–1)
- **A. chinensis var. taquetii** A. chy-NEN-sis var. tah-KWET-ee-eye (4–8, 8–1)
- **Brachyscome iberidifolia** brah-KIS-ko-mee eye-beer-ih-dih-FO-lee-uh (0–0, 12–1)
- **Campanula punctata** kam-PAN-yew-luh punk-TAY-tuh (5–9, 8–1)
- **Cosmos atrosanguineus** KOZ-mos at-ro-san-GWIN-ee-us (7–11, 12–1)
- **Cymbopogon citratus** sim-bo-PO-gon sih-TRAY-tuss (9–11, 12–1)
- **Dianthus deltoides** dy-AN-thus del-TOY-deez (3–10, 10–1)
- **D. gratianopolitanus** D. grat-see-ay-no-PO-ih-tah-TAN-uh (4–8, 8–1)
- **Emilia javanica** ee-MEEL-yuh jah-VAH-nih-kuh-huh (3–9, 9–1)
- **Eupatorium purpureum** yew-puh-TOR-ee-eem pur-PUR-ee-eem (3–9, 9–1)
- **Euphorbia marginata** yew-FOR-bee-ee-muh mar-jih-NAH-yuh-tuh (0–0, 12–1)
- **Eustoma grandiflorum** yew-STO-muh gran-dih-FLOR-uhm (8–11, 12–1)
- **Gomphrena globosa** gom-FREE-nuh glo-BO-suh (11–12, 12–1)
- **Lamium maculatum** LAM-ee-um mak-yew-LAY-tum (4–8, 8–1)
- **Leucanthemum ×superbum** loo-KAN-theh-mum soo-PUR-bum (5–8, 8–1)
- **Melissa officinalis** meh-LISS-uh o-fiss-ih-NAL-iss (4–9, 11–1)
- **Miscanthus sinensis** miz-KAN-thus sy-NEN-siss (6–9, 9–1)
- **Monarda citriodora** muh-NAR-duh sih-tree-o-DOR-uh (5–9, 10–2)
- **Ocimum basilicum** OSS-ihmum buh-SIL-ih-kum (0–0, 11–1)
- **O. ×citriodorum** O. sih-tree-o-DOR-uhm (0–0, 11–1)
- **Pelargonium citronellum** peh-lar-GO-nee-um sih-tron-EL-uhm (10–11, 11–1)
- **Pelargonium crispum** P. KRIS-pum (10–11, 11–1)
- **Perilla frutescens** peh-RILL-uh froo-TESS-enz (0–0, 12–1)
- **Phlox paniculata** FLOKS pan-ik-yew-LAH-tuh (4–8, 8–1)
- **Polonium boreale** pahl-ee-MO-neem bor-ee-AH-lee (4–8, 8–1)
- **Ruditellafulgida var. fulgida** rood-BEK-ee-ee-muh FUL-jih-duh-duh (4–9,9–1)
- **R. fulgida var. sullivantii** R. FUL-jih-duh-duh var. sul-ih-VAN-tee-eye (4–9, 9–1)
- **R. grandiflora** R. gran-dih-FLOR-uhm (5–9, 9–5)
- **R. hirta** R. HUR-tuh (3–9, 10–1)
- **R. laciniata** R. luh-syn-ee-EE-tuh-yuh (3–9, 9–1)
- **R. maxima** R. MAKS-ih-muh (4–8, 8–1)
- **R. nitida** R. NIH-tuh-duh (5–8, 8–1)
- **R. occidentalis** R. ahk-sih-den-TAL-iss (3–9, 9–4)
- **R. subtomentosa** R. sub-toh-men-TOH-suh (4–7, 7–1)
- **R. triola** R. try-LH-buh (3–11, 12–1)
- **Salvia farinacea** SAL-vee-uh fah-rih-NAY-seeh-ee (8–11, 12–1)
- **S. officinalis** S. oh-fiss-ih-NAL-iss (4–10, 10–1)
- **Sauromatum venosum** saw-ro-MAY-tuh veh-NO-sum (7–10, 12–10)
- **Senna hebecarpa** SEH-nuh hee-bee-KAR-puh (3–9, 9–4)
- **Sorghastrum nutans** sorr-GASS-trum NOO-tanz (4–9, 9–1)
- **Thymus ×citriodorus** TY-muss sih-tree-o-DOR-uhm (5–9, 9–1)
- **Tithonia rotundifolia** tih-THO-neeh-ee-yuh ro-tund-ih-FOW-lee-ee (10–11, 12–1)
- **Trachelospermum jasminoides** trat-kohl-oh-SPOOR-mum jaz-mih-MOH-deez (8–11, 12–8)
- **Zinnia elegans** ZIN-ee-ee-ee-ee EL-ih-ganz (0–0, 12–1)
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