

American Horticulturist

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News Edition

Rolling Stones

No, we haven't turned into a rock and roll magazine, nor are we going to write about moss gardens. But we are going to report back from some recent and rare forays out of our offices.

The month of April saw two very different, major gardening events: the 46th Annual Williamsburg Garden Symposium, cosponsored by the American Horticultural Society and Colonial Williamsburg; and the opening ceremonies for AmeriFlora '92, the first international gardening exhibition to be held in the United States.

This was the first Williamsburg symposium for *American Horticulturist* Editor Kathleen Fisher, but she was in the minority. Some attendees come back each year to learn about gardening, to meet the famous speakers, and to reunite with old friends. Everyone we talked to, however, agreed that this may have been the best ever. Rosemary Verey was gracious, Jim Wilson was just as congenial as he seems on "The Victory Garden," and Rosalind Creasy had everyone chuckling in recognition as she described gardening with children. Other speakers, who represented the "Great Gardeners" of the theme, were every bit as inspiring.

For Assistant Editor Mary Beth Wiesner, the visit to AmeriFlora '92 was a trip home, but home was never like this.

COURTESY OF COLONIAL WILLIAMSBURG FOUNDATION



The pomp and circumstance of opening day, attended by President and Mrs. Bush, was leavened by the antics of mime groups. The historic conservatory had been expanded. Over 20 countries had erected horticulturally related displays. Since it was barely spring at the time, the event promises to get better and better. There's plenty of time to attend AmeriFlora '92, which lasts through

October, and to think about attending next spring's Williamsburg Garden Symposium. And in this issue you'll find the program for another big event, our own Annual Meeting in October. ♦



COURTESY OF AMERIFLORA '92

Above: The Taliaferro-Cole garden is one of scores in Colonial Williamsburg that attempt to reflect designs of two centuries ago. Left: Sleeping Beauty's castle is just one of the Disney World topiaries sure to delight visitors to AmeriFlora '92. Franklin Park Conservatory is in the background.

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Annual Meeting Program Enclosed!

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AMERICAN HORTICULTURIST

EDITOR: Kathleen Fisher

ASSISTANT EDITOR: Mary Beth Wiesner

EDITORIAL ASSISTANT: Steve Davolt

MEMBERSHIP DIRECTOR:

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ADVERTISING: American Horticultural Society Advertising Department, 2700 Prosperity Avenue, Fairfax, VA 22031. Phone (703) 204-4636.

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KATHLEEN FISHER

M. Kent Brinkley, landscape architect for Colonial Williamsburg, explains an old method for sheltering transplanted boxwoods until they become established. In the tour group was author and keynote speaker Rosemary Verey, far left.

A Little Time With Rosemary

During an afternoon tour of Colonial Williamsburg gardens, our group was lucky enough to cross the path of Rosemary Verey, who joined us and proceeded to display a depth and breadth of knowledge about our country's history that would humble the average American.

We're used to the British humbling us with their horticultural knowledge. But Verey, whose many books include *The American Man's Garden* and *The American Woman's Garden*, emphasized in her keynote address at the Williamsburg Garden Symposium that gardens on her side of the Atlantic would be "much the poorer" without American plants and American designers.

Of course, they influenced us first. Gardening books such as Gerard's *Herball* and *Paradisus in Sole* no doubt came over with some of the first colonists, Verey said, and the British impact on early gardens can still be seen in restored gardens such as Bacon's Castle in Virginia.

But soon plant collectors such as John and William Tradescant and John Bartram began to export American plants, particularly trees, many of which are still favored in Verey's country more than in their own.

"I think at least half of my border is American plants," Verey told me later, "particularly fall-bloomers, such as *Helianthus* and asters."

Prince Charles, who wrote an introduction to her most recent book, *A Country Woman's Year*, and frequently calls her for advice, has recently developed a feverish

passion for Texas bluebonnets, Verey related. "If any of you have any seeds I do hope you'll let me know."

A literally feverish passion for gardening by an 18th-century royal may well have changed the course of history, Verey observed. Prince Frederick of Wales, an avid horticulturist and the driving force behind the establishment of Kew, died from a pneumonia he contracted after gardening in the rain. "If he had lived," she said, "we would never have had George III."

Verey's first avocation was horses, rather than plants. After many years as an enthusiastic equestrian, she said, "One day in 1960 I was galloping through a meadow when I suddenly decided, 'I've done enough of this,'" and exchanged her bridle for a trowel.

This makes gardening sound like work, however, which is not how Verey feels about it. During a panel discussion, key speakers were asked what gardening chores they would face when they returned home. Rosalind Creasy said she had planted too many peppers; Jim Wilson said he would be tending a wildflower meadow of 50 to 60 species. "Gardening should not be a chore," responded Verey. "It should be a pleasure."

When panelists were asked for pest control tips, Verey described her mole control bowl. "You must capture one live mole, which you put at the bottom of a large bowl. All night long it will cry piteously. This will attract the attention of all the other moles. In the morning you will find the bowl full of all of those who came to his rescue." —Kathleen Fisher, Editor

Helping Kids 'Catch' Gardening

During a question-and-answer session on the last day of this year's Williamsburg symposium, an audience member asked a panel of its featured speakers for advice on dogs in gardens.

"Isolate them," was Rosalind Creasy's succinct reply.

"That's your only advice?" the questioner asked despairingly.

"Yes."

Ten years ago, Creasy might have offered similar advice in relation to children. "Not *all* children belong in gardens," she still says today. But for the past eight or nine years Creasy has welcomed neighbor children into her garden—photographing them, playing with them, working with them, teaching them, and learning from them.

Creasy herself was not a born gardener. "I started gardening at the age of five when my father gave me some extra tomatoes. I thought the garden was an offshoot of my doll house, and I moved them every few days." But fortunately her father, who had more than enough tomatoes from his own plot, didn't try to make her conform.

She didn't become a serious gardener until she took a trip to Israel, where the soil is so poor it may take five to seven years and cost thousands of dollars to produce one acre of arable land. She became haunted by how inefficiently Americans use their land. In the course of researching the issue, she discovered edible plants that were beautiful and colorful—"Rosa Bianca" eggplants, pink pearl apples, blue potatoes. The result was her award-winning book, *The Complete Book of Edible Landscaping*.

"Gardening is caught, not taught," she believes. "I've learned that you can't make children do anything they don't want to do." If her plans call for planting sunflowers and a child finds "a beautiful, big spider," the agenda will just have to change to encompass hunting for more spiders. When it was suggested to one preschooler that he was putting his pea seeds too close together, he retorted with total conviction: "I like them that way."

Her adult neighbors haven't always enthusiastically embraced her ideas, either. She recalls meeting the father of two of these young gardeners as she was removing her lawn prior to planting her first edible landscape. "Dr. Buck had just paid \$750,000 for his house and I could tell what he thought about the idea of *vegetables* growing in the front yard right next door."

Nor was Creasy particularly thrilled when children discovered her garden. She quickly learned what would happen if she



PHOTOS COURTESY OF ROSALIND CREASY

While you can't make youngsters love plants by assigning chores, "all children adore pulling carrots," says Rosalind Creasy. Former carrot critic Noah got a new perspective in her garden.



invited them to pick anything. "They're like piranhas. They have no barriers against greed." Fortunately, because her garden serves as her photography studio and is torn up every six months so that she can experiment with a new landscape, this presents no problems. The word goes out and the children descend. She recalled the year she planted masses of flowers in what she called her "Giverny garden." One child, Cheryl, was especially thrilled to hear the words, "take anything you want." Cheryl called the subsequent collecting frenzy her "fantasy flower fling."

"This is something I was never able to do as a child, so I get a lot of vicarious enjoyment from it," Creasy said.

The children have since brought their parents into the act. When Creasy harvested her 100-square-foot wheat field, a heart surgeon, three PhDs, and a master's-degree social worker showed up to perform "the tennis shoe twist" to separate the grain. The result was 20 loaves of bread for the annual Fourth of July block party. The neighbors have since forbidden her to deprive them of the tradition.

Through her slides, the Williamsburg audience met many of the children who've gardened with Creasy over the years. One, clearly an audience favorite, showed Noah, the four-year-old son of a book illustrator. Creasy asked him if he would like to pick some carrots, but when he got to where they were planted, he seemed baffled not to find them lying on the ground. "Try pulling on those green things," Creasy directed. The look on his face when he unearthed Bugs Bunny's favorite edible was sheer wonder. "All the children adore pulling carrots."

She's also taught the children some basic propagating techniques. "I suggested that we try crossing some bumpy gourds with smooth ones. Once they did that they got Q-tip fever. They wanted to cross everything in the garden, including pansies with petunias."

Not everything she's done has been a hit. She once built a vine-covered tepee, thinking that it would be a wonderful place for the children to hide. "But some of the girls didn't like it. The floor was too dirty."

The children have taught her to "loosen up my ideas," she says. After a German garden, and a Christopher Columbus garden, she plans an Alice in Wonderland garden. "I'm going to plant white roses, and graft some red roses onto some of the bushes. Then I'll make a soft sculpture playing card who will be painting the roses red."

Did Dr. Buck ever get used to all the wild doings next door? You bet. He was the heart surgeon doing the tennis shoe twist.

—K. F.

Some Very Special Specialists

Jim Wilson asked for a show of hands. How many specialize in roses? Hostas? Herbs? A large number responded that daylilies were a current favorite, and as he predicted, many, like himself, are now passionate about wildflowers.

It's possible to overspecialize, he indicated. "That sometimes happens at novice flower shows, where the desire to win buries courtesy and consideration." But for the most part, a plant passion offers a rationalization for acquiring new plants and legitimizes a desire to roam and meet interesting people. "And it builds strong bodies eight ways."

Wilson has met many gardening specialists in his eight years as the "Victory Garden South" host on the PBS series. "In Milwaukee," he boasted, "Victory Garden' is shown three times during prime time. It's the most popular show on PBS, led only by Lawrence Welk reruns."

Inevitably, it seems, most expert gardeners have had a mentor: someone who has inspired them, coached them, invited them to a plant meeting. "I can't emphasize enough the need for a welcoming attitude on the part of plant society members. Don't just inform people about your meetings. Give them a personal invitation; offer to come by and get them, and stay with them during the meeting. That first society meeting, when it seems that everyone is speaking in Latin binomials, can be terrifying."

To older gardeners he issued another plea. "It's the saddest thing in the world when a beautiful garden is sold to a person who doesn't care a fig about plants," he said. Since not many gardens can be preserved in toto, it's important to share those valuable plants "before you feel the grim reaper hot on your tail."

Wilson was a natural to address the topic of expert gardeners. Two years ago, he wrote about 11 he has interviewed in *Masters of the Victory Garden*.

Participants met some of these gardeners in slides and others in a video Wilson showed. One of them, Maureen Ruettgers, was there in person to talk about growing herbs and how she uses them.

He first took us to the three-acre Woodinville, Washington, home of Rex and Jeanine Smith. Jeanine hybridizes rhododendrons. After a slide of her 'Apricot Fantasy' drew sighs from the audience, Wilson explained that it took 18 years from seed to introduction in the trade. Rex helps with the heavy tasks of building cold frames and moving large shrubs. Jeanine does the delicate work of storing pollen in carefully labeled gelatin capsules, pollinating the stigmas, and germinating the resulting seeds under



ROY KLEHM

Roger Anderson, above, covers peony blossoms with paper envelopes to prevent contamination by insects. Ed Rezek, below, created a spiral topiary from a false cypress cultivar.



ANN REILLY

fluorescent lights.

Then it was on to Harrisonburg, Virginia, and the antique fruit tree orchard of Elwood Fisher. Fisher has for 20 years collected heirloom fruit trees, grape vines, and berries to preserve them for future generations. He has crowded some 2,500 kinds of fruit onto three-quarters of an acre, by espaliering and by grafting several types on one root stock.

Among apples, Fisher has varieties for pies, others for cider and jam, "keepers" that overwinter well, and others best for hand-eating right off the tree. Many were brought to America by early European settlers. Now growers in Europe are coming to Fisher for fruit cultivars.

Roger Anderson, a machinist living near Fort Atkinson, Wisconsin, has succeeded in crossing tree peonies and herbaceous peonies. His introductions include the pink 'First Arrival'; 'Cora Louise', a pink-centered white flower; and 'Bartzella', a fragrant double lemon yellow that has produced up to 60, six-inch blooms on a single plant.

In Minnesota, Ruth and Hugh Cocker have been growing and hybridizing lilies for some 30 years. In their half-acre meadow of lilies, Wilson recalled, he saw only three weeds, and then not until Ruth stooped to pick them.

Wilson told of meeting Brother Charles Reckamp, an 86-year-old daylily hybridizer in Techny, Illinois, who was profiled in the June *American Horticulturist*. "I was directed toward three men trying to move a serviceberry tree with a root ball that must have weighed 600 pounds. The other two men looked like they were in their 70s. I started to take off my jacket to help, but Brother Charles stopped me. 'No young fella, you better take it easy. You're from the city and we're used to this.'"

Through his videotape, Wilson introduced us to Ed Rezek, a Long Island resident who collects dwarf conifers; Charles and Lee Jeremia of Newberry, South Carolina, who specialize in old roses; John and Ann Swan of Chester, Pennsylvania, who collect, grow, and bottle peppers; and Weesie Smith, whose Birmingham, Alabama, woodland garden was a tour site at the 1991 AHS Annual Meeting.

Although gardeners he features on his show are some of the most dedicated and talented in the country, Wilson has a philosophy for presenting their work to "middle America" that helps explain his enormous popularity. "I think I have a responsibility never to hold up an impossible dream, so that gardening becomes something about which people say, 'When I get time I'll start doing it.'" —K. F.

Gardening in Separate Beds

Walter and Fran Bull have the ideal marriage. He doesn't go near her bed except when invited, and she doesn't mess around in his. This has nothing to do with sleeping arrangements, but with keeping domestic peace in their gardens.

Walter's space, their slides attested, is all exuberance: container plants, perennials, water plants, roses. Fran's, while equally rich with plants, is less ornamental, more scientific. Less collecting, more crossing. Fewer explosions of color, more straight rows.

This experiment in separate gardening quarters began in 1982, when the Bulls moved into a new home that was part of an urban renewal project near the University of South Carolina. Walter, who wrote about his garden for the January/February issue of *Fine Gardening*, recalled that "the only living things were one clump of irises, six wax myrtles, and fire ants."

The plot, which is not particularly huge but did include a swimming pool in back, was attacked one section at a time. First came the two 15-foot-square areas on each side of the front steps. Daylilies were a disappointment in what amounts to midwinter there ("Winter came on a Saturday that year," Fran quipped at one point.) because the yard was bare when they went dormant. So Walter branched out to other perennials, conifers, and most striking, a pyracantha espaliered up the sides of the front steps. It looked especially stunning in a rare snow that Walter rushed out to capture on film. Bulbs flower through winter, and butterfly bush retains its foliage.

Neighboring houses loom only 10 feet away on either side. One side, where there is a brick walk and no soil, he has crammed with containers. The mild winters mean that roots don't freeze, so he's able to grow camellias, azaleas, sasanquas, and magnolias. Those that might otherwise grow fat and cramp the three-foot wide walk have been espaliered against the wall. He's lit the area, which includes some statuary and a fountain, and he showed his audience the different mood created by the lighting at night, his favorite time to water.

He didn't fight the fact that one corner was hopelessly shaded. The spot is made even shadier by a rose arbor, which affords protection for delicate woodland plants like Jack-in-the-pulpit. A strip of soil is planted with bulbs, including allegedly sun-loving cannas.

But Walter didn't really hit his stride until he attacked the back yard, the motto of which seems to be "Water plants, water plants, everywhere." One barrel for



PHOTOS BY WALTER BULL

Fran Bull has grown watermelons on the archway that leads into her garden, above.

Walter Bull takes advantage of a shady corner, below, to grow woodland plants.



water lilies led to four, then a retired bathtub, then a pond. Soon there was not enough room for lilies and lotuses and fish, so he retired the swimming pool along with the bathtub. "When I reached middle age, I decided I liked gardening better than floating around with a drink." The next slide, however, showed him doing just that. "I wasn't middle-aged at this point," he added quickly. He now gets in the pool only to move plants, deadhead them, and receive an affection nibble from his fish.

Through the circuitous path of a terrace garden he took his audience up a hill "where I see Fran waiting for visitors."

Fran's garden is entered through an archway, which she has tried covering with a number of different plants, including watermelons. "When watermelons near the top started getting large, I held them up with pantyhose. I realized this was a mistake when I started getting a lot of watermelons and it looked like I was growing a crop of nylons."

On a fence that forms a border between the his and her areas, she has plant mandevilla vines. "I like the way mandevilla looks. When it blooms I can't see Walter's garden and sometimes I can't even see Walter."

Walter was kind enough to build her a greenhouse, using one sliding glass door on each end and two on each side, where she sometimes lets him place a plant or two. "I didn't realize until I had it that peppers and cabbages could be perennials. I lost a four-year-old pepper plant this year. I was very sad."

"This," she announced, showing a slide of a rabbit, "is my partner in composting." A dedicated composter, she is known as "the bag lady" by some neighbors, who've accepted this strange hobby enough to unload bags of leaves outside her fence. She didn't want just any conventional looking compost bin, however, so she had Walter build her a three-section model with beams across the top, on which she has grown both tomatoes and gourds. "I call it the Compost Taj Mahal. It's big enough that I can just pile the leaves and wait."

In one corner of the garden, Fran is "growing an orchestra" in cooperation with the university's music and biology departments. She planted *Arundo donax*, a cane plant used to make reeds for instruments. Answering the phone one day, she was told to hold, and a few moments later, was serenaded with a bassoon using her home-grown reeds. "They said the canes grown in France sound better. I thought it sounded pretty good." The biology department's role is to use an electron microscope to find out

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Water-loving plants are the centerpiece of Walter Bull's garden.

Separate Beds Continued from page 5

why the French reeds sound different.

The division of labor continues in the immaculate tool shed. Noting the color patches painted on each tool, she explained: "Mine are green. Walter's are blue."

Rue and huge fennels are grown not primarily for consumption by humans, but as larval food for swallowtail butterflies. "I consider this a swallowtail preserve," she said. "So if you have any caterpillars you don't want, please send them to me."

Another multiple-purpose plant she grows is the hyacinth bean. She says it provides beautiful color in salads if

picked while still under two inches long, and a "branch" of it with both flowers and tiny beans is nice in flower arrangements. It's also a champ at covering things quickly since it can grow to 30 feet in a season. "That's pretty amazing for a half-inch long bean, isn't it?"

The audience gasped, less at the bright magenta flower on the vine than at the explosive power packed in those little beans: each of us had been given a packet of them as a souvenir. I suspect my husband will want me to plant mine on my side of the garden. —K. F.



Fran Bull has grown tomatoes and gourds on the top of the "Compost Taj Mahal."

Special Titles From AHS Books

It seemed that nearly everyone at the Williamsburg Garden Symposium took advantage of the presence of Rosemary Verey to purchase and have her sign one of her books. Told by one participant that the book *A Flower Arranger's Garden* was a gift for his young daughters, Verey filled more than a page with her best wishes. We can't send you autographed copies but we can send you books by Verey and other Williamsburg speakers for a limited time at a special member discount rate.

Rosalind Creasy

- The Complete Book of Edible Landscaping \$18.75
- Cooking From the Garden \$29.75

Rosemary Verey

- The American Man's Garden \$34.00
- The American Woman's Garden \$42.50
- The Art of Planting \$29.00
- A Country Woman's Year . \$17.00
- The Flower Arranger's Garden \$29.00

Jim Wilson

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The Flowering of AmeriFlora '92

Franklin Park in Columbus, Ohio—site of AmeriFlora '92—holds a special place in my heart. My husband-to-be and I spent many hours wandering around the park, exploring the conservatory, and sharing picnic lunches on its grassy expanse. We didn't have much money in those early days so our main source of entertainment was walking. Franklin Park, with its 88 acres of winding paths, provided endless enjoyment.

I had been on a site tour of Franklin Park during its renovation for AmeriFlora '92 two years ago, but nothing could have prepared me for the completely transformed Franklin Park that greeted me and more than 20,000 other visitors on opening day, April 20. The changes in the park are tremendous. Garden areas abound and each turn in the path brings visitors upon a different pocket of landscaping or a small garden space. And at each turn are things to delight as well as educate.

The park is divided into three areas:

◆ **Old World Traditions Gardens.** Here visitors will see the newly renovated and expanded Franklin Park Conservatory, the focal point of the AmeriFlora '92 exhibit. The original structure, built in 1893, was modeled after a conservatory built for the 1893 World's Columbian Exposition in Chicago. That conservatory in turn was modeled after London's Crystal Palace, built in 1851 for the first World Exposition. Franklin Park's original 13,250-square-foot Palm House



COURTESY OF AMERIFLORA '92

Opening day visitors to AmeriFlora '92 were welcomed by President George Bush and entertained by the Cone Heads.



MARY BETH WIESNER

was restored to its former glory, and a 55,100-square-foot structure, including over 18,000 square feet of greenhouse space was added. The new addition comprises a series of display rooms, each featuring a different ecosphere—Himalayan mountains, lowland tropical rain forest, desert, Pacific Island, tree fern forest, and tropical cloud forest. There are changing art exhibits throughout the grand foyer and other areas of the conservatory. A wonderful selection of contemporary quilts and wildflower paintings was on display the day of my visit.

Also in this area are the Old World Rose Garden and the Victory Garden. The Victory Garden is one of four temporary regional gardens created as sets

for the PBS television series, "The Victory Garden." Here a timber frame house is surrounded by a typical Midwestern garden. There's a cold frame in the backyard and a side yard features raised beds filled with vegetables and flowers.

The Old World Rose Garden, designed by Stephen Scanniello of the Brooklyn Botanic Garden, is filled with more than 4,000 old and new cultivars. The garden overlooks a lagoon and the Walt Disney World topiary displays in America's Backyard.

◆ **America's Backyard.** Each of the 1,500-square-foot plots visually demonstrates a contemporary garden theme or concern, such as backyard recycling, gardening for wildlife, or environmental gardening. Among the more than 20 gardens are a well-labeled hosta garden planted by the American Hosta Society, a landscaping display that shows the same garden throughout a 30-year-period, and a container garden.

The landscaping series starts with the garden in its first year, followed by a young landscape at five to 10 years, a mature landscape at 10 to 20 years, and the prime landscape after 20 to 30 years. Each time period reflects a change in garden furniture as well as additions to the landscape in the forms of new plantings and a small pond.

The charming container garden provides landscaping around the Longaberger Home, sponsored by the Longaberger Company in Dresden, Ohio, which creates hand-made baskets sold during in-home shows similar to Tupperware parties. In addition to terra cotta containers and window boxes, Longaberger baskets overflowing with pansies fill plant holders built into both sides of a wrought iron fence.

The "Great Gardeners of America"
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MARY BETH WIESNER

The Victory Garden is a temporary set for the PBS series. It features a timber frame house surrounded by a Midwestern garden filled with flowers and vegetables.

More Ohio Gardens

Planning a visit to AmeriFlora '92? You may want to include a side trip to some of Ohio's other gardens. The Chadwick Arboretum, Inniswood Metro Gardens, Topiary Park, and Whetstone Park of Roses are in the Columbus area; others are only a short drive away.

◆ **Chadwick Arboretum**, Ohio State University, 2001 Fyffe Court, Columbus, OH 43210, (614) 292-3136.

◆ **Cincinnati Zoo and Botanical Garden**, 3400 Vine Street, Cincinnati, OH 54220, (513) 281-4701.

◆ **Cox Arboretum**, 6733 Springboro Pike, Dayton, OH 45449, (513) 434-9005.

◆ **Dawes Arboretum**, 7770 Jacksontown Road S.E., Newark, OH 43055, (614) 323-2355.

◆ **Falconscape Gardens**, P.O. Box 1529, Medina, OH 44258, (216) 723-4966.

◆ **Fellows Riverside Gardens**, Mill Creek Metro Park District, 816 Glenwood Avenue, Youngstown, OH 44502, (216) 740-7116.

◆ **Garden Center of Greater Cleveland**, 11030 East Boulevard, Cleveland, OH 44106, (216) 721-1600.

◆ **Gardenview Horticultural Park**, 16711 Pearl Road, Strongsville, OH 44136, (216) 264-1021.

◆ **Holden Arboretum**, 9500 Sperry Road, Mentor, OH 44060, (216) 946-4400.

◆ **Inniswood Metro Gardens**, 940 Hempstead Road, Westerville, OH 43081, (614) 895-6276.

◆ **Irwin Krohn Conservatory**, 950 Eden Park Drive, Cincinnati, OH 45202, (513) 561-7340.

◆ **Kingwood Center**, 900 Park Avenue West, Mansfield, OH 44906, (419) 522-0211.

◆ **Secrest Arboretum**, OARDC, Wooster, OH 44691, (216) 264-1021.

◆ **Topiary Park**, Deaf School Park, Town Street and Washington Avenue, Columbus, OH 43215, (614) 645-7047.

◆ **Toledo Botanic Garden**, 5403 Alma Drive, Toledo, OH 43615, (419) 536-8365.

◆ **Whetstone Park of Roses**, City of Columbus Recreation and Parks Department, 4015 Olentangy Boulevard, Columbus, OH 43214, (614) 645-6648.

◆ **Woodland Arboretum**, 118 Woodland Avenue, Dayton, OH 45409, (513) 222-1431.

AmeriFlora Continued from page 7

lecture series was created to complement the visual experiences of America's Backyard. Lectures, sponsored by the American Horticultural Society and First Community Bank of Ohio, are held every Saturday. (For more information on the series see page 23.)

◆ **Community of Nations Gardens.** Represented here are 21 countries—Argentina, Australia, Canada, Costa Rica, the Dominican Republic, Egypt, France, Germany, Holland, India, Italy, Japan, Kenya, Korea, Malaysia, Mexico, Monaco, the Philippines, the Republic of China, the former Soviet Union, and the United Kingdom—each taking a different approach. Some areas are landscaped with beautiful gardens. Some feature buildings representing the architecture of the country. Other countries have provided slide shows and still others have included gift shops. The Australian area includes a small nursery where visitors can purchase eucalyptus and other plants as well as books, coats, hats, stuffed toy kangaroos and koala bears, shampoo, and other goods. The Malaysian exhibit includes displays of the fruits, vegetables, and flowers grown in that country.

My favorite was the German exhibit, which includes a section of the Berlin Wall and a photographic exhibit and video on its history. But the most fascinating parts of this display were two miniature villages built on sloping hills. Two-foot high cottages with thatched moss roofs are landscaped with tiny forget-me-nots and miniature flowers. A rustic twig bridge rises over a small stream and every few minutes model trains weave around the hills and through the villages.

Another feature of the Community of Nations area was the "Scotts World of Grasses" display garden. The O. M. Scott & Sons Company used 12 varieties of turfgrass to create a 55-foot-wide living map of the world. Blue flowers fill in the oceans and white ground covers depict the North and South Poles. In front of the map are 12 raised beds, each containing one of the turfgrasses. Signs in each bed describe the grass's growing habits and provide a map showing where it grows. Scotts and Columbus's Oakland Nursery also donated products and services to renovate and maintain 60 home lawns in the residential neighborhood surrounding Franklin Park as part of AmeriFlora's Good Neighbor Program.

I spent about eight hours wandering around the park and still didn't see everything. Among the things I missed were the Discovery Pavilion, which includes two exhibits: "I Love This Land," a multimedia show featuring 21-screen panoramic photography and

five-channel surround sound, in which Ohio kindergarten and first-grade students talk about America; and "Seeds of Genius," a videotape on the life and inventions of Ohio native Thomas Edison.

The Smithsonian Institution's traveling exhibit, "Seeds of Change," is also a part of the attractions. The exhibit explores the exchange of plants, animals, and peoples that resulted from Christopher Columbus's voyages. It traces the impact on the globe of five "seeds"—corn, potatoes, disease, horses, and sugar. "Seeds of Change" presents Native American, African, European, and global views of events that began in 1492.

There are plenty of things for children to do at AmeriFlora '92. A maze garden based on those created in 18th-century Europe is fun for both children and adults to puzzle through. The ballerina hippo from "Fantasia," prim Mary Poppins, Sleeping Beauty's castle, and other Disney World topiaries are sure to bring a smile. There are playground areas sponsored by the Columbus Zoo, a dinosaur discovery dig, a carousel, and an area to play with remote control boats.

Restaurants at AmeriFlora '92 offer everything from "fast food" to sit-down dining at pubs and theme restaurants. There is also a picnic area. Several pavilions and amphitheaters are home to a wide variety of entertainment. Visitors will get a brochure listing daily events. Keep a watchful eye out for the street entertainers that pop up in the most



SHARON L. WIESNER

Strange and unusual street performers entertain visitors throughout the park.

Group Tracks Private Collections



Toy trains rumble around miniature thatched cottages in the German exhibit.

unexpected places. The "Cone Heads" (loosely based on the characters from "Saturday Night Live") put in a brief appearance during the opening ceremonies and had everyone laughing. The four curious Cone Heads glided around the park inspecting camera rounds, taking pictures of tourists, and trying on hats that belonged to visitors, including one worn by a local policeman. The intergalactic visitors instantly befriended one of their own—a bald-headed man sitting in the bleachers—before they wandered off.

When I visited AmeriFlora '92 at the end of April, not many things were blooming in Columbus, but the park was filled with color. Magenta and purple banners arch over the entryway and throughout the park maypoles are draped with brightly-colored streamers, some topped with tiny whirligigs. Fanciful sculptures—like Gerome Kamrowski's whimsical creatures, which inhabit a streamside garden, or Ken Valimaki's flock of pink and fuchsia flamingos dipping their feet into the cold water of the lower lagoon—are everywhere. AmeriFlora '92 representatives say that a million annuals will be blooming this summer and 100,000 chrysanthemums will create a giant mum festival this fall. Now that the flowers have started blooming and the roses in the Old World Rose Garden are putting on a display, I can imagine that the park is a riot of color. I hope I'll get a chance to return before the show is over. ♦

—Mary Beth Wiesner, Assistant Editor

Franklin Park is two miles east of downtown Columbus on East Broad Street. Daily admission is \$19.95 for adults. Children ages four to 12 are \$9.95, children three and under are free, and senior citizens are \$16.95. Season passes start at \$89. Group discounts are available in advance. The park is open from 9 a.m. to 10 p.m. every day until September 7; from September 8 through October 12 hours are 10 a.m. to 8 p.m. Sunday through Thursday, and 10 a.m. to 10 p.m. Friday and Saturday. For more information call (800) 837-1992.

Barry Glick wants to make more worthy plants available to gardeners. And he's confident that the newly formed North American Plant Preservation Council (NAPPC) will do just that.

Modeled after England's National Council for the Conservation of Plants and Gardens, NAPPC is a non-profit organization that documents outstanding plant collections throughout the United States and Canada. While that goal sounds similar to that of the American Association of Botanical Gardens and Arboreta (AABGA), the two groups have recently formed an agreement that should guard against duplicate efforts. AABGA will direct its efforts to identifying and listing plant collections held by public gardens, universities, and other public institutions; NAPPC will identify and list collections held by private collectors and nurseries. Nor should the council be confused with the Center for Plant Conservation. The latter concentrates on preserving rare and endangered native plants, while NAPPC will focus on collections of cultivated plants and species.

Glick formed the council in August 1991 and asked over 150 plant societies to let their members know about the organization. "The horticultural grapevine is the fastest growing plant in the world," he says. The group already has over 100 plant collections listed in its database.

Dr. W. George Schmid of Tucker, Georgia, holds a hosta collection. Schmid, author of *The Genus Hosta*, has nearly 1,000 hosta cultivars and species in his garden. Polly Hill of Martha's Vineyard is guardian of a *Stewartia* collection. In Kansas City, Missouri, Dr. Jim W. Wad-dick, author of *Iris of China*, is keeping a 150-species iris collection; in Chantilly, Virginia, Bill Voss carefully tends over 300 begonias; and 230 *Acer* species and cultivars are grown by Michael A. Kristick in Wellsville, Pennsylvania.

A board of directors—horticultural heavyweights from nurseries, botanical gardens, and other horticultural organizations—oversees council operations and determines the standards for the collections. NAPPC will publish a directory of the collections this fall. Each entry will include the name of the collector, location, and number of cultivars and species. The list also will indicate if the garden is open to the public and list the hours of operation or a phone number if the collection can be viewed by appointment only. The directory will be updated



quarterly and a new one published each year.

Glick sees NAPPC as a clearinghouse for information about plants and the experts who grow them. "It's a place for people to find people with a common interest," he says. While the plant collections database is the council's first priority, other goals include arranging conferences and exhibitions and

visits to gardens and nurseries.

The group hopes to encourage the conservation of uncommon plants through propagation and distribution. These plants may be valuable for historic, aesthetic, scientific, or educational reasons. A good example is the true German iris, *Iris germanica*, sometimes called grandmother's early blue and sometimes sold as the cultivar 'Purpurea'. A pre-ninth century iris, it's the one Van Gogh made famous in his 1889 painting. "It's commonly seen in gardens throughout Delaware and Pennsylvania," says Dr. Arthur Tucker, a council board member, "but if it's bought through a catalog, you don't receive the same plant." Collection holders are encouraged to distribute such plants, thereby preserving them for future generations.

So far all of the collection holders have informally agreed to share cuttings and divisions and to make plants available for propagation. "In some cases only one or two people may be growing, say, a cultivar of a rose that existed 600 years ago in Spain," Glick says. "If both those people live in South Carolina, the rose could have been destroyed during Hurricane Hugo and lost forever. We want to encourage people in diverse areas of the country to grow plants so they won't be lost through natural disasters or disease."

NAPPC also will work with interested collectors to establish living wills. The council will serve as a connection between collectors and institutions so that a plant collection won't be lost in the event of the collector's death.

The council is funded through private donations and relies on volunteer workers. Board members and others have donated money as well as plants, which Glick has bartered for legal work, clerical help, graphic design, and printing.

The directory and updates and, eventually, a monthly newsletter will be available for an annual fee.

For more information or an application to hold an NAPPC collection write North American Plant Preservation Council, Route 5, Renick, WV 24966.

Members' Forum

Bradford Clones

I was very much interested in the letter from Bill Flemer III regarding 'Bradford' pear in the March issue. Mr. Flemer may have seen my article on cultivars versus clones, which appeared in *American Nurseryman* on December 1, 1988. The article was reprinted by two English horticultural publications that are seen by most people in the field of horticulture in England, and a great many knowledgeable writers have now resorted to using the word clone and totally ignoring the word cultivar.

The problem is not confined to 'Bradford' pear, but involves a great many other plants as well. For example, seedlings being sold as *Cornus kousa* 'Milky Way' are not 'Milky Way' but *C. kousa*. *Laburnum* seedlings are being sold as 'Vossii' when they are not 'Vossii' but are *L. watereri* seedlings. *Rhododendron* 'Vulcan' seedlings are not 'Vulcan' but seedlings of a cross between *R. griffithianum* 'Mars' and *R. griersonianum* seedlings. *Helleborus* 'Potters Wheel' are

not 'Potters Wheel' but *H. niger*.

Because of lack of knowledge on the part of people in this country, growers, who do not want to be limited to the much slower vegetative propagation of clones, are able to palm off seedlings, which are a much more rapid method of propagation, under the clonal names and the buyers end up not getting what they expect. The only way that this situation will ever be corrected in this country is if the horticultural media step forward and make this knowledge available to everyone in the field.

Henry A. Ross
Strongsville, Ohio

Henry A. Ross is founder and director of the nonprofit public botanical garden, Gardenview Horticultural Park, Inc., in Strongsville. Bill Flemer III, who is president of Princeton Nurseries in Princeton, New Jersey, says Ross is quite right that the taxonomic literature and the International Code of Nomenclature of Cultivated Plants are "confused and confusing" in their definition of the terms

clone and cultivar.

A clone is vegetatively propagated from a single parent plant, from cuttings, tissue culture, buds, or grafts. It is genetically identical to the parent plant.

*Liberty Hyde Bailey coined the term cultivar, first referring to it, according to Ross, in a 1923 volume of *Gentes Herbarum*. Bailey referred to cultivars as "groups or races of plants" that had originated and persisted under cultivation and did not exist in the wild. "These groups are obviously not clones as he never suggested that these plants were identical in all respects," says Ross.*

A cultivar by today's definition is a group of plants that display as little as one common characteristic. Ross uses the following example:

"In visiting somebody else's garden or nursery, you admire a magnificent lily that is six-feet tall with a dozen very large trumpet flowers in a gorgeous shade of orange. You are told the lily is 'African Queen'.

"You rush home, dig out the catalog of a lily specialist, and order several bulbs of 'African Queen'. But when the plants bloom, each is entirely different from the others. And not one is like the lily you first admired. One bulb produces an 18-inch-tall plant with only two flowers, each three inches long. Another produces a plant eight feet tall with deformed flowers of a dirty brownish orange, while another is just a so-so plant of no particular merit.

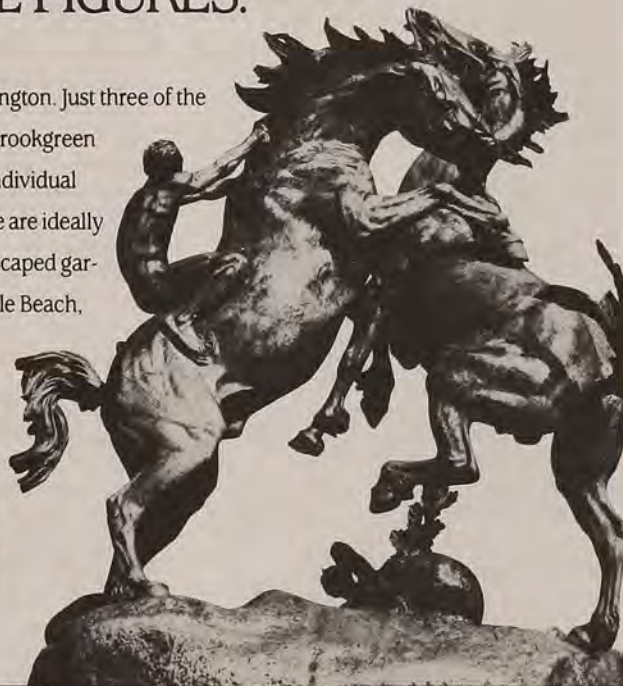
"What you have discovered is that 'African Queen' is a cultivar name applied to any lily with trumpet-shaped flowers in any shade of orange that resulted from a cross of two particular species. These lilies can all be different heights, sizes, shapes, and shades and so on. But they are all 'African Queen' lily."

There is now no accepted method for differentiating clones and cultivars, says Ross.

*Increasingly, some clones are being patented by their developers. Commercial Nursery Company, Inc., in Decherd, Tennessee, recently agreed to an out-of-court settlement of their suit against two other growers for infringing on their patents of two dogwood clones, *Cornus florida* 'Cherokee Sunset' and *C. florida* 'Cherokee Daybreak'. The defendants pleaded guilty and were required to destroy the trees and pay monetary damages, according to Hubert A. Nicholson, the nursery's president. The trees were being vegetatively propagated, but the two nurseries sued were not licensed to do so.*

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While You Garden, Save Those Seeds

It's time again for members to start thinking ahead for the American Horticultural Society's Annual Seed Program. The 1992 program offered over 200 varieties of seed, thanks to the generous spirit of sharing on the part of our members, seed companies, plant and horticultural societies, seed exchanges, and botanical gardens and arboreta.

Many members requested that we expand our vegetable seed offerings in 1993. In order to do this, we need our members to take a little extra time this summer to select and collect seed from their garden vegetables.

Do you grow a particularly delicious and/or disease-resistant species of corn, tomato, cantaloupe, pepper, or bean? Do you have heirloom vegetables you would like to see grown by more people to keep the variety from disappearing? Can you coax some seed from your next-door neighbor who grows sweet juicy cherry tomatoes, or your father-in-law who grows perfect watermelons?

We also need seed from annuals, perennials, grasses, herbs, wildflowers, or trees and shrubs. How about collecting seed from those daylilies or hostas by your front door? Could you spare some seed of that towering sunflower, hollyhock, or foxglove in your back yard? As you harvest some of your basil,

oregano, cilantro, and marjoram, could you let a few plants go to seed?

It's easy to collect seed.

Seeds from legumes like peas or beans can be simply removed from the pods and allowed to dry.

Seeds of most annual and perennial flowers, ornamental foliage plants, herbs, and green leafy vegetables can be picked dry and separated by a screen or shaken in a paper bag.

Seed encased in fleshy fruit—tomatoes, eggplants, berries, and most tree fruits—needs to be separated from the pulp. Let these fruits turn a bit overripe before harvesting them. Then scrape out the fruit's seedy section, add some water to it, and let it sit a few days. As the mixture ferments, lightweight seeds and pulp will float to the top and the useful larger seeds will sink to the bottom.

After separating seeds, immediately spread them out on paper towels or newspaper in a dry, airy room. Larger seeds need at least a week to dry; smaller seeds are usually dried after about four days.

After the seeds have been separated and dried, place them in a plastic bag or envelope. (If you use an envelope, be sure to tape it up well or smaller seeds will leak out.) Please send enough seed to fill about 200 small seed packets. In the case of tree and shrub seeds, send at least 400

seeds. Place the seed envelopes in a padded mailing envelope, label "Hand Cancel," and mail to: 1993 Seed Program, American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308-1300.

Clearly identify each type of seed (botanical and common name). Describe the plant's height, growth habit, flower color, culture, etc., and add any information you have on germination requirements.

In our 1993 seed catalog, we would like to publish several of the most interesting or entertaining stories associated with any of our members' 1992 gardening experiences. Just include these short anecdotes with the seeds. If you don't have the seeds, send in the story anyway.

Be sure to include your name and address, so we can give you credit, and your phone number in case we have any questions about your seeds.

Your seeds will benefit not only other AHS members but also a variety of nonprofit educational and social service groups. Surplus seeds are donated throughout the year to schools, day care centers, nursing homes, hospitals, prisons, and urban community gardening programs.

If you have any questions call GIS at (800) 777-7931 between 11 a.m. and 3 p.m. Eastern Daylight Savings Time.

—Maureen Heffernan
Seed Program Coordinator

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Regional Notes

Regional Conservation Seeks to Fill Gaps

Last year Bill Brumback scoured the hills and valleys of New England searching for endangered plants. During his travels he gathered the seeds of turk's-cap lily, beach pea, and gravel weed, clammy azalea, hoary willow, and screwstem. At year's end he and volunteers had collected seeds from 54 species and the New England Plant Conservation Program (NEPCoP) was well underway.

Brumback is conservation director of the New England Wild Flower Society (NEWFS), which started NEPCoP last year. It is the first regional plant conservation program in the United States, created to protect all of New England's endangered plants by the year 2000.

NEWFS, which acts as the catalyst and administrator of NEPCoP, is the oldest native plant conservation organization in the United States and the only regional native plant society. It was one of the first two sponsors of the Center for Plant Conservation and during the last several years has conducted research on conserving rare and endangered plants for the U.S. Fish and Wildlife Service, Massachusetts Natural Heritage Program, and the Center for Plant Conservation.

Wildflower society members and nine foundations provided over \$500,000 to initiate the program. Full funding of \$10 million—which includes an endowment program, an additional building for NEPCoP staff, and a Rare Plant Reserve—is expected to take 10 years.

NEPCoP includes representatives from 65 public and private conservation and land preservation organizations in the six New England states. State task forces annually review plant endangerment and determine collection priorities. A regional advisory council oversees policies.

A regional program can fill gaps in federal and state programs. In 19 years, the federal process has listed only 300 plant species—less than 10 percent of the plants that national authorities have determined are “of concern.” “By the time a species is listed as endangered at the national level, it's the eleventh hour,” Brumback says. State programs are concerned with many different plants within their political boundaries, but these may not be the plants that are endangered on a regional level.



*Last year volunteers collected the seeds of spreading globeflower (*Trollius laxus*) and 53 other endangered or rare species as part of the New England Wild Flower Society's New England Plant Conservation Program. The spreading globeflower, which has pale yellow flowers, is found in fens and calcareous swamps in the Eastern United States, but the plants are rare in New England.*

NEPCoP, on the other hand, by collaborating with other conservation organizations, can look at New England as one big state, Brumback says, and make better decisions regarding conservation. The group gives first priority to plants that are endangered throughout their range in New England. The program also attempts to collect rare plants that are a part of the natural heritage of the area, including species that are common outside New England, but on the edge of their natural range—and therefore endangered—in the region.

Another NEPCoP goal is to develop consistent policies regarding taxonomy, habitat protection and management, rarity determination, and reintroduction of native plants. “No single organization can look at the whole problem,” Brumback says. An example is the case of endangered natives growing on public land. Some agencies have mandates to protect those plants, others do not. “By collaborating with other groups we can determine how best to protect New

England's endangered species,” Brumback explains.

NEPCoP emphasizes habitat preservation as the primary method of conservation. In the event of a catastrophe in the wild, NEPCoP also maintains a seed banking program as a back-up and performs cultivation research to provide information about the biology of the plant. This off-site, or “ex situ,” conservation is widely accepted as a supplement to protecting plants in natural areas. “When we learn how to germinate seeds and cultivate endangered plants we're a lot more knowledgeable about what's going on in the wild,” Brumback says. “Based on those observations we can make recommendations to those working with plants in the field.” Plants will be grown in the nursery at the Garden in the Woods, NEWFS's botanic garden, and eventually will be planted in a Rare Plant Reserve there. The collection will provide a genetic resource and be used for public education.

The seeds of many of last year's priority plants are already germinating and Brumback is satisfied with NEPCoP's initial progress. He says the challenges ahead include “deciding which species are in fact endangered throughout New England (the last list was published in 1981), collecting from enough populations to get a good representation of the genetic variability associated with each species, determining the best germination and seed-banking procedures, and developing methods to alert the public to our disappearing plant heritage.”

Brumback hopes to add the seeds of up to 40 rare or endangered species to NEPCoP's seed bank in 1992. This summer and fall he and other volunteers from the participating organizations will journey from the sand plains of Block Island off the southern coast of Rhode Island to the top of New Hampshire's Mt. Washington in search of northern gentians, small-flowered leafcups, green dragons, sea pinks, buffaloberries, and devil's bits.

For more information on the New England Plant Conservation Program contact the New England Wild Flower Society, Garden in the Woods, 180 Hemenway Road, Framingham, MA 01701-2699, (508) 877-7630.

Garden Fanatics Invade Sleepy New Hampshire Isle

Certain islands—Alcatraz and Devil's Island, to name a couple—have a distinctive, inescapable attraction. A tiny New Hampshire island has just the opposite problem—keeping visitors out. Six miles off the coast of Maine and New Hampshire, Appledore Island has become an increasingly popular destination of gardening enthusiasts, in spite of a \$25 admission fee intended to deter tourists.

Besides being the home of a few dozen year-round residents, Appledore Island is the site of Shoals Marine Laboratory, a summer education facility run jointly by Cornell University and the University of New Hampshire. Courses taught on the island range from marine biology to coastal ecology to biological illustration.

But the interest for paying visitors is the restored formal Victorian garden of Celia Thaxter. Thaxter (1835-1894), the daughter of a lighthouse keeper, became an obscure poet as well as hostess of the Appledore House, the island's resort hotel. In the shallow topsoil of the granite island, she planted a terraced garden near her cottage, where she grew poppies and hollyhocks, lilies and sweet peas, foxgloves and sweet Williams. There she entertained such illustrious guests as Harriet Beecher Stowe, Sarah Orne

Jewett, and William Morris Hunt. (Chances are, these 19th-century notables were more enthralled with Thaxter's blooms than her verse.) Thaxter's garden was immortalized in the acclaimed paintings of American impressionist Childe Hassam.

Little of the garden remained after fire destroyed the resort in 1914. The island was then occupied by various military installations and finally, Shoals Marine Laboratory. University staff and the Rye Beach-Little Boar's Head Garden Club of New Hampshire collaborated to re-create the garden in the late 1970s. Laboratory founder John M. Kingsley headed the effort, taking Thaxter's fastidiously detailed book, *An Island Garden*, as his guide.

But the garden and the island remained hidden treasures until publicized by newspapers and gardening magazines in recent years. Enter the thundering hordes. Because the minuscule island's facilities were perilously strained by the unexpected

crowds, the laboratory imposed a \$25 fee that it hoped would be cost-prohibitive enough to reduce tourism to a manageable level. But even at that rate, 288 dogged sightseers appeared on Appledore Island during the summer of 1991.

The invasion of Appledore by vacationing mainlanders left little damage and had at least one constructive result. Money remaining after expenses was earmarked as financial aid for summer students on the island. Those profits totaled more than \$6,000 in 1991 and could go much higher this summer.

Islanders still fret about their severely limited carrying capacity, but nevertheless, Appledore Island will once again open to the public this summer at the \$25 rate.

For further information, contact Shoals Marine Laboratory, GL-14, Stimson Hall, Cornell University, Ithaca, NY 14853, (607) 255-3717.

Carolina Arboretum Top Public Garden

The North Carolina State University Arboretum has been named the top public garden for 1992 by the American Association of Botanical Gardens and Arboreta (AABGA).

The 12-year-old arboretum, located in Raleigh, has 6,000 different taxa from 42 countries on its eight acres. In presenting the award in June, the AABGA cited the arboretum's programs in education, research, and plant introduction as models for public gardens throughout the country. Each year its director, J. C. Raulston, supplies 200,000 cuttings to the nursery trade, along with background information on their origins, culture, and commercial value, to encourage the use of a wider variety of plants.

The arboretum holds the world reference collection of juniper ground covers, and the world's largest collection of redbuds. A 40-year-old dwarf weeping winged elm recently moved there is believed to be the only one in the world. Other features include dwarf loblolly pines, 450 varieties of daffodils, some of the largest Japanese crape myrtles in the country, a Zen Buddhist-style Japanese garden, and a 300-foot-long perennial border.

How Do You Spell Arboretum?

Warren Roberts, superintendent of the Davis Arboretum of the University of California, keeps a record of all the inventive ways people spell the name of the institution. As of October 1991, the list included the following 74 spellings:

Abaretum	Arberedum	Arboretum	Arbretum
Abattorium	Arberetum	Arboreture	Arbrierum
Abboretum	Arberitum	Arboretum	Arbrutorium
Aboretum	Arbetorium	Arboretwon	Arburetum
Abortium	Arbitrarium	Arboreum	Ardoietum
Abortum	Arboertum	Arboriatorum	Arobetum
Abrboretum	Arbonetum	Arboretium	Aroboretum
Aburetum	Arbor Dep't	Arborium	Arobretum
Adboretum	Arboraetum	Arborptum	Artoretum
AirBoretum	Arborarium	Arboretum	Arvaritum
Airboretum	Arborateum	Arbortium	Arvoretum
Arabatam	Arboratum	Arbortreeum	Barbaratom
Arbaritum	Arbordetum	Arborutum	Barberetum
Arbatterium	Arboreatum	Arboterium	Barbouretum
Arbatoeum	Arboretum	Arbotetum	Darboretum
Arbatorium	Arboreteum	Arboteum	Herborium
Arberarium	Arboretium	Arbouretum	Orabatium
Arberation	Arboretom	Arboutiem	Rborretam
Arberatum	Arboretor		

The arboretum newsletter quotes Thomas Jefferson: "I have nothing but contempt for a person who uses only one way to spell a word."

Reprinted with permission of Davis Arboretum, University of California. The Davis Arboretum was established in 1936 on approximately 300 acres on the banks of Putah Creek near the center of the Great Central Valley, now the campus of the University of California, Davis. Arboretum plantings feature hundreds of species of trees and woody plants adapted to the local Mediterranean climate, including a native plant section with plants from seven different California habitats, a 15-acre oak grove, a low-water-use garden, and a white flower garden. For more information on the arboretum call (916) 752-4880.

Gardeners' Q&A

Q: *I would like to change jobs to something more garden-related. Where can I get some good information on the kind of jobs available in horticulture today and the amount of education and experience required for them?*

K. T., Washington, D.C.

A: Horticulture encompasses a wide array of jobs, from greenhouse management to landscape design, from plant propagation to horticultural therapy. The Gardeners' Information Service at the American Horticultural Society has an excellent source list of commercial and nonprofit horticultural organizations that you can write to for detailed horticultural career information. To receive the information sheet, send a stamped, self-addressed envelope to: AHS, Career Information, 7931 East Boulevard Drive, Alexandria, VA 22308-1300.

Colleges and universities that offer degrees in horticulture also have comprehensive information available concerning education and work experience necessary for various positions in horticultural research and jobs in commercial and public horticultural organizations.

Q: *The honeydew melons and cantaloupes I grew last year were smaller than expected and were not very sweet. What do you think I'm doing wrong?*

P. J., Burlington, Vermont

A: It could be any number of things. Some of them you can still correct during this growing season, while others will have to wait until next year.

Your melons may be too crowded. Thin out your vines so remaining melons can grow larger.

Melons will be stunted and flavorless if they are not given a steady supply of water. Make sure the crop is irrigated at least weekly if there has not been enough rain. (Melons can rot if the ground is too wet; raise maturing melons off the ground a bit by setting them on dry mulch, wooden boards, or a metal can.)

Keep an eye out for insect damage. Heavy leaf damage can also affect fruit production and size.

If you are not regularly building up your soil's structure and fertility, then it may be poor soil health that is reducing your melons' size. Next spring, and every spring, work generous amounts of compost into your vegetable bed. Have

the soil analyzed for its nutrient content. It may be lacking in phosphorous and potassium. If so, add some bone meal and greensand or kelp meal.

You should also make sure that you are not planting your melons too late in the season for them to fully mature. Those who live in a northern area with a short growing season, as you do, should plant early maturing varieties. Some especially sweet varieties are 'Sweetie' (66 days), 'Sweet 'n' Early Hybrid' (75 days), 'Sweet Bush Hybrid' (a space-saving bush type plant that matures in 74 days), 'Earlisweet' (68 days), and 'Early Silver Line' (an exotic, white-fleshed oriental melon that matures in 76 days and is a very sweet and fragrant dessert melon).

Finally, make sure melons are fully ripe before harvesting. The stem ends should appear dried and withered, and the melon should be easy to pull from its stem.

Sources for the early-maturing melons include W. Atlee Burpee Company, 300 Park Avenue, Westminister, PA 18974; Johnny's Selected Seeds, 310 Foss Hill Road, Albion, ME 04910; and Stokes Seed Company, Box 548, St. Catherine, ON Canada L2R 6R6.

Q: *A neighbor recently lost a very beautiful old tree to lightning. Can you tell me how to install some protection for my own big trees?*

D. M., Raleigh, North Carolina

A: Lightning protection is indeed a very valuable preventative measure against severe damage to historic, memorial, or important specimen trees. More importantly, installing lightning protection in trees can usually protect people from severe injury or death. However, it is not a job for an amateur, and it is expensive.

Trees that should have lightning protection include lone trees in open areas, and trees that overhang homes and other buildings, tennis courts, swimming pools, and other recreational areas.

Lightning protection will not prevent lightning from striking a tree, but it conducts the electric charge harmlessly to the ground. Copper conductors are installed in the tree and connected to a ground rod. When lightning strikes the tree, the electric current follows the path of least resistance, flowing along the copper conductors and rod. If a tree has been expertly outfitted with protection, there will usually be no evidence whatsoever that lightning struck the tree. If an unprotected tree is hit by lightning, the

electric charge may hop over to a nearby water pipe, television antenna, downspouts, or even a metal ladder leaning up against a building. The resulting heat may be enough to catch a building on fire.

Trees that have had lights installed in them are other good candidates for lightning protection. Lightning would find the metal lights the path of least resistance and flow through the electric wires, which may be connected to a home or office building.

If you think you have trees that should be protected, contact a tree company that has a reputation for quality workmanship and technical expertise. Make sure the arborists use top quality copper conductors and ground rods. After a system is installed, the above- and below-ground systems should be inspected annually. The conductors will have to be moved higher as the tree grows.

It is expensive to protect a tree, but in terms of future property value or potential damage, it may well be worth the initial cost. The cost is based on trunk diameter, height, and number of leader branches. The average costs to protect an 80-foot white pine that has one central leader would be about \$1,000. Protecting an 80-foot willow oak or 100-foot tulip poplar that has several leader branches will cost about \$2,000.

Q: *I really like plants with silvery gray foliage to add contrast to bright colors in my perennial garden. In addition to artemisia, lamium, santolina, and sedum, can you suggest some other plants?*

M. B., Lincoln, Nebraska

A: Plants with silvery gray foliage do very well as "shock-absorbers" when planted among brilliant primary-colored flowers. Their foliage emphatically accentuates bright blues, yellows, and scarlet reds. They are also effective as transition plants between flowers whose colors might clash if they were planted side-by-side.

There are many intriguing varieties of gray and silver plants in addition to the widely used ones you have mentioned. Some that I consider especially versatile, easy-to-grow, and lovely include *Achillea* species (yarrow), *Anaphalis triplinervis* (pearly everlasting), *Cerastium tomentosum* (snow-in-summer), *Echinops ritro* (small globe thistle), *Festuca ovina* var. *glauca* (blue fescue grass), *Gypsophila elegans* (the annual form of baby's breath) and *G. paniculata* 'Bristol

Fairy' (a perennial cultivar), *Hosta sieboldiana* (a blue-green plantain lily), *Lavandula angustifolia* 'Hidcote' (English lavender), *Lychnis coronaria* (rose campion), *Perovskia atriplicifolia* (Russian sage), *Thymus vulgaris* 'Silver Posie' (a silver-leaved thyme), *Veronica incana* (wooly speedwell), and *Yucca filamentosa*.

If you cannot find a source for any of the above plants, call our Gardeners' Information Service at (800) 777-7931 and we will help you locate a supplier for seeds or plants.

Q: Last spring several azaleas near the front of our home formed fewer flower buds than the year before, and not all buds opened. The plants appear to have no obvious foliage diseases or insect problems. I am regularly applying a fertilizer for acid-loving plants. What might be causing this poor flowering?

G. E., Alexandria, Virginia

A: You may be giving plants too much nitrogen. Excessive nitrogen fertilization can encourage foliage growth at the expense of flower bud formation and flowering. If you are using a fertilizer with a high nitrogen content, you may want to try one with a different formula.

It is always best with ericaceous (acid-loving) plants to have the soil pH checked every few years. Even though you are applying a fertilizer prepared for them, heavy mulch can make the nutrients less available. If there is a brick walk or limestone foundation near the plant, it can make the soil more basic.

Flower bud development begins right after spring flowering has ended. During this period it is essential that plants have a steady supply of moisture. Water deeply around the root zone at least biweekly during very dry weather and mulch around plants to retain moisture.

Mulch is especially important for protecting the shallow roots of azaleas, which are very susceptible to damage from hoes, lawn mowers, rototillers, or other equipment. The soil around them should never be cultivated, and the mulch layer should be at least three to four inches deep.

When deadheading azaleas in the spring, you should be careful not to pick off the new shoots that will contain the next year's developing buds. However, once flowering is finished, older azaleas may benefit from pruning to rejuvenate flowering. Since flower buds form along the entire branch, an azalea branch can be pruned anywhere. Dead, damaged, or unproductive branches should be cut off to ground level, but heavy pruning is usually unnecessary, and most deciduous and evergreen azaleas look best if allowed to grow naturally. —Maureen Heffernan
Education Coordinator

Plant Experts Name Some Winners

A fern, a grass, and a vine are among the plants honored this year by the Pennsylvania Horticultural Society and the Ohio Nurserymen's Association for their beauty and durability. These plants are not new introductions, but species or cultivars that have proven their worth over time.

Among the winners of the Pennsylvania society's Gold Medal Award are:

◆ *Clematis viticella* 'Betty Corning' (USDA Zones 5-7). Named for a former AHS Board Member, 'Betty Corning' has small bell-like flowers that are silver on the outside and lavender blue inside. It will bloom from June through September and tolerate shade and some drought.

◆ *Picea orientalis* (Zones 4-7). A pyramidal spruce that may reach 90 feet, it does not lose its lower branches, which have a horizontal, somewhat pendulous habit. It tolerates hot, dry summers.

◆ *Viburnum* × 'Eskimo' (Zones 6-8). Introduced by the late Donald Egolf of the U.S. National Arboretum, it is the first viburnum to combine tubular flowers and snowball inflorescences. Compact at four feet high and five feet wide, it resists bacterial leaf spot.

◆ *Crataegus viridis* 'Winter King' (Zones 5-8). This hawthorn has clean, silvery bark, orange-red berries, and tolerates pollution. It is vase-shaped when young and grows to 30 feet with a more rounded habit.

◆ Two magnolias: *Magnolia grandiflora* 'Edith Bogue' (Zones 6-10) and *Magnolia* × 'Galaxy' (Zones 6-9). The former, which has a pyramidal form and large white, lemony-scented flowers, is the most cold hardy Southern magnolia. The latter is also pyramidal but about half as tall at 20 to 30 feet.

The nine plants receiving the endorsement of the Ohio nurserymen include:

◆ *Festuca ovina* var. *glauca* 'Elija Blue' (Zones 4-9). This ornamental fescue retains its ice blue color through the heat of summer and has buff-colored flowers. It is drought tolerant and does not produce seed.

◆ *Polystichum polyblepharum* (Zone 5). The tassel fern differs from other ferns in its thick, waxy, evergreen fronds, which hold up well as cut greens.

◆ *Acer japonicum* 'Aconitifolium' (Zone 4b). The full-moon maple has leaves three to four inches wide and nine to 11 lobes. Each foliage layer has a different color, beginning as a soft green and changing to yellow and scarlet in fall. It is hardy to 25 degrees below zero.

◆ *Buddleia davidii* var. *nanhoensis* (Zone 5). There are many cultivars of this species—'Nanho Blue', 'Nanho Purple', 'Nanho Alba', 'Petite Plum', and 'Petite Indigo'. They are distinguished from

other butterfly bushes in having a more compact, spreading dwarf habit (three to four feet tall), fine foliage, and an abundance of honey-scented flowers.

◆ *Chamaecyparis obtusa* 'Filicoides' (Zone 4). The threadleaf Hinoki false cypress has dense, pendulous, fernlike foliage, which some see as straggly. It has multiple uses, since it grows slowly, but can eventually attain 40 feet tall and three to four feet wide.

◆ *Hydrangea paniculata* 'Tardiva' (Zone 3). More cold-hardy than the species, it is somewhat smaller at 10 feet high and 10 feet wide. Older stems have peeling gray bark. The flowers are a combination of insignificant, yellowish fertile flowers and showy, less numerous sterile flowers, which are pure white fading to pink.

◆ *Pinus pumila* (Zone 4). The Japanese stone pine is a dense, almost prostrate dwarf, growing to two feet in 10 years. Its blue-green needles are curved and swept forward. It can be hard to find, although several cultivars have been selected for their color and slow growth.

◆ *Stewartia pseudocamellia* (Zones 5-8). The Japanese stewartia can bloom for more than a month, with the peak of its display in mid-July. Its hairy fruits and reddish purple fall color add to its value, but its most outstanding feature is the exfoliating bark in colors that range from tan to reddish orange. It grows to 20 to 40 feet and has withstood temperatures to 22 degrees below zero.

◆ *Veronica* × 'Sunny Border Blue' (Zone 5). This speedwell has small, navy blue flowers on strong stems that may reach two feet, and rich, dark green leaves.

A 'Moonbeam' Worth Chasing

The Perennial Plant Association has named *Coreopsis* 'Moonbeam' as its plant of the year. The cultivar, whose origins are somewhat mysterious, has foliage similar to that of threadleaf coreopsis, *C. verticillata*. But while the flowers of the latter are bright chrome yellow, those of 'Moonbeam' are a pale lemon, and it will not invade other plants by suckering as the species does. It remains about 18 inches wide and high, and blooms throughout the summer and into fall in southern locations.

AHS Bulletin Board

AHS to Host Life Lab Course

The American Horticultural Society will be hosting a two-day Life Lab workshop for teachers of kindergarten through eighth grade, principals, and other interested youth educators or parents August 10 and 11 at River Farm.

Life Lab is an award-winning program recognized for educational excellence by the National Science Foundation, National Diffusion Network, and National Science Teachers Association. Developed by teachers for teachers, it recognizes children's natural curiosity and desire to explore the world. It shows educators how to use gardens as living laboratories for teaching science and nutrition.

Life Lab actively engages students and motivates them to learn how to construct ideas based on their experiences and the information they gather from critical observations of plant growing processes. In this way, they learn how science theory is tested and reformed.

Students and teachers work together to transform bare school grounds and/or classrooms into garden laboratories. Depending upon resources and space, those educators having completed a Life



The Life Lab program uses gardens as living laboratories.

Lab workshop have built outdoor school gardens, indoor grow boxes, container gardens adjacent to classrooms, greenhouses, and even a one-acre farm.

For registration information for the August Life Lab workshop at AHS, please

call Maureen Heffernan at (703) 768-5700. For more information on the Life Lab Science Program, please contact: Lisa Glick, Program Director, Life Lab Science Program, 1156 High Street, Santa Cruz, CA 95064, (408) 459-2001.

AHS Intern Awarded Chadwick Fellowship

Alastair Bolton, an AHS intern for the past year, has been named the 1992-93 recipient of the Dorothy Jordon Chadwick Fellowship at the U.S. National Arboretum. He was among 20 applicants.

The fellowship combines hands-on gardening with curatorial research projects involving the arboretum's Asian plant collection, one of the country's best collections of documented plant germplasm from mountainous and undeveloped regions of Asia. Some of Bolton's curatorial research work will involve finding appropriate bamboo species for use as ground covers and illustrating plants for an interpretive guide to the Asian collection.

Bolton completed his year-long horticultural internship at River Farm in June. An architect whose interests became more directed toward plants and landscape design, he has generously contributed his considerable skills and creativity to a wide range of jobs. These have included illustrations for the *American*



Alastair Bolton.

Horticulturist News Edition and special publications, calligraphy and signs for River Farm, the design for our National Home Composting Park, and an updated survey of the River Farm grounds.

Credit Card Benefit

The American Horticultural Society is pleased to announce an exciting new member benefit. Now members will be able to select from one of two credit cards created exclusively for members of AHS. Both display the AHS name and logo.

"It's a convenient way to pay for credit purchases, from buying garden supplies to booking airline tickets," said Darlene Oliver, AHS membership director. "Plus, every time you make a purchase with the AHS credit card, a small percentage of the purchase price goes to AHS. Every account that is opened and every account that renews earns royalties for AHS."

Oliver observed that this will bring additional funds to AHS at absolutely no additional cost to members, while giving them benefits not available through other credit card plans. "All of these extra funds go to support the AHS educational programs, from demonstrations to lectures, exhibits to workshops, internships to symposia."

For more details on the credit card and its benefits, see the ad on page 11.

Compost Park Update

Magazines, journals, and newspapers across North America have been following the development of River Farm's National Home Composting Park, both as the largest demonstration site of its kind and as an innovative teaching facility.

The park, which boasts more than 80 different composting bins and methods, has now been landscaped with herbs and other edible plants, including heirloom corn varieties that grow to 14 feet tall, gooseberries, and blueberries. Members can see colorful glimpses of the park in the May/June *Garden Design* magazine. Other publications that have recently mentioned the park include *BioCycle*, *HortIdeas*, and the *Washington Post*.

Madison Dean Board Nominee

Illinois native Richard L. Lower, associate dean of the College of Agricultural and Life Sciences at the University of Wisconsin-Madison, has been nominated to the AHS Board of Directors. After earning graduate degrees in plant genetics and plant breeding from the University of Illinois and Purdue University, Lower worked for five years as a vegetable breeder and geneticist before he began teaching at North Carolina State University in the Department of Horticultural Sciences. He became professor and chairman of the Department of Horticulture at the University of Wisconsin-Madison 11 years later and was named associate dean in 1984. Lower's specialty is genetics and plant breeding of vegetable crops. He has led the board of directors of the American Society of Horticultural Science as president and chair. He is currently chair of the Plant Germplasm and Pest Manage-

ment Strategies Subcommittees of the Agricultural Experiment Station's Committee on Organization on Policy.

As a training site, the park has provided in-depth workshops for cooperative extension personnel, Master Gardeners, and master composters from 18 states and provinces. Since February 1991, over 5,000 individuals and professionals have received training at the park, which has also hosted delegations from the National Wildlife Federation, Solid Waste Composting Council, Environmental Protection Agency, and other state and regional agencies. In September, the park and River Farm will welcome over 100 garden writers and columnists who will visit during the annual meeting of the Garden Writers Association of America.

In addition to supplying extensive information regarding every facet of composting, from high-tech solar-powered compost tumblers to low-tech

worm composting boxes, the park also offers training and workshops on grasscycling and mulching mowers; improving the health and quality of lawns by leaving grass clippings behind; chipping, shredding, and mulching; and the use of compost for potting mixes, lawn topdressing, mulching, and basic soil amendment.

The park's heirloom, edible, and wildlife landscaping is being developed with the assistance of landscape architect Pam Grenade, working with the Washington firm of Lila Fendrick Landscape Architecture and Garden Design, as well as Mike McConkey of Edible Landscaping in Afton, Virginia, and Dr. Jeff McCormack of Southern Exposure Seed Exchange in North Garden, Virginia.



Richard Lower.

AHS Board of Directors Proxy

Notice of Election in conjunction with the 47th Annual Meeting of the American Horticultural Society. Cut out proxy and return by September 16, to President, AHS, 7931 East Boulevard Drive, Alexandria, VA 22308-1300.

I will not be able to attend the Annual Meeting of the American Horticultural Society on October 15, 1992. Please assign my proxy to AHS President, George C. Ball Jr., or

to cast my ballot in the annual election of the Society's Board of Directors, and to cast my ballot in other matters that may be brought before the Annual Meeting with the same effect as though I were personally present.

Vote for one.
 Richard L. Lower

Write-in Candidate

Name

Address

City / State / Zip

Signature

Date

Improved Service for International Members

To better serve overseas and Canadian members, beginning with this issue all of AHS's international mail is being transported via Global Mail's Air Surface System. This should significantly reduce delivery times, which are now two to four weeks for European members, one to three weeks for Canadian members, and up to six weeks for some other countries.

Global Mail, a vendor endorsed by the U. S. Post Office, picks up foreign-bound publications directly from our printer, sorts them by country, stamps and processes them within 18 hours.

The new service should give AHS better control over its international mail. If an issue does not arrive within a specific time, Global Mail will send another via

priority air mail. Their contract also promises prompt return of any improperly addressed or undeliverable mail.

Look at Your Label

There's new information on the mailing labels on your *American Horticulturist* News Editions and magazines. The top line of the mailing label is a string of numbers. The first five digits are your member ID number (or account number). That is followed by a space and then a four-digit expiration date—the year of expiration followed by the month. For example, if the number on the label is 9303, membership expires in March 1993.

Gardeners' Bookshelf

The Folklore of Trees and Shrubs

Laura C. Martin. *Globe Pequot Press, Chester, Connecticut, 1992. 221 pages. 7" x 10". Black-and-white line-drawings. Publisher's price: hardcover, \$24.95. AHS member price: \$21.20.*

As education coordinator at the American Horticultural Society, I am often asked by teachers to give their classes tours of the gardens here at River Farm. Thanks to Laura C. Martin's two previous books on flower folklore, I rarely have a problem capturing and holding the attention of children (and adults!) even on the hottest summer days. I always begin with her explanation of the etymology of the dandelion. When children are shown that the dandelion's jagged leaves resemble a lion's ferocious fangs, they genuinely come to life and ask (sometimes demand) the stories behind other plants. I then point out how the skinny long leaves of the spiderwort plant look like the legs of a giant spider.

Suddenly, they see everyday plants in a completely new way and realize that careful observation of the natural world can be wonderfully entertaining. After such garden folklore tours, children often begin to make up their own stories and explanation of plant names. They even create their own names for plants after carefully observing specific plant characteristics.

Even for adults, garden tours can be quite boring, especially if they are already familiar with most garden ornamentals.



"This is a so-and-so and it is hardy to Zone 5, and blooms during summer . . ." But begin to talk about the more esoteric uses or folklore of a plant, and interest is immediately revived. The most common and unexceptional weeds or garden plants become vivid when seen for their symbolic associations with religion, romance, history, or the more pedestrian culinary, cosmetic, or medicinal uses.

Now, with *The Folklore of Trees and Shrubs*, I will be able to include even more fascinating background, including plant history, Greek plant mythology, the Doctrine of Signatures, medieval and Renaissance plant lore, ethnobotany, and colonial American plant medicines. For example, when pointing to a barberry plant (*Berberis wilsoniae*), I can explain the Doctrine of Signatures, i.e., that the appearance of a plant was once thought to hold a clue as to what medical ill it could treat. Since this particular barberry shrub has yellow stems, it was thought to cure jaundice.

When I come to a hemlock tree (*Tsuga canadensis*), I can explain that the branches were used in Native American sweat lodges because they were thought to induce sweating and break fevers, and that Alaska natives make bread from the inner bark.

At our large bamboo grove, I can explain how Thomas Edison used a carbonized filament from bamboo stems to make his early incandescent light bulbs. In fact, bamboo was used for light bulbs until 1910, when it was replaced by metal wires.

If a group of teenagers visit, I can explain why the Irish rock band U2 named a recent album after the Joshua tree (*Yucca brevifolia*). The book explains that the Joshua tree is associated with mystical qualities because it looks like a person praying or a prophet wildly gesticulating in the wilderness for the rest of us to repent. The Mormons named it after the prophet Joshua because they thought it also resembled a prophet pointing the way to the promised land.

This book contains a mixture of such facts and folklore on more than 100 trees and shrubs. Included is the botanical and common name, origin, a morphological description, and zone for each plant. While the book includes some cultural information, it is not meant as a growing guide. It provides only the briefest of cultural guidelines and contains no information on pruning, fertilizing, or diseases.

Each tree or shrub is beautifully

illustrated with botanically accurate black-and-white line drawings of the mature silhouette and of the branch tip with buds and leaves. For most, significant flowers, seeds, and fruits are also illustrated. Deciduous trees are shown as bare-branched silhouettes, which are more hauntingly lovely than photographs because they highlight the essential individuality of the plant, allowing one to grasp its distinguishing naked presence and mystery.

The Folklore of Trees and Shrubs should help the reader gain a deeper understanding of and reverence for the history, personality, and character of many of our most common trees and shrubs.

—Maureen Heffernan
Education Coordinator

Landscaping With Wildflowers

Jim Wilson. *Houghton Mifflin Company, Boston, 1992. 244 pages. 8" x 9 3/4". Color photographs. Publisher's price, hardcover: \$35. AHS member price: \$29.75.*

One look at the opening photograph in Jim Wilson's *Landscaping With Wildflowers* and I was hooked. It's really a pretty simple photo—a weathered green fence is underplanted with a profusion of wildflowers in shades of lavender, periwinkle, orchid, and ivory. But the soft colors and romantic feel of David Benner's photo made me want to dig right in.

After reading Wilson's *Masters of the Victory Garden* last year I was already looking forward to this new book. It was everything I expected it to be.



It is a book filled with practical advice, helpful hints, and photographs both beautiful and educational. Each chapter introduces a different type of wildflower garden—woodland shade gardens, meadows, prairies, and wildflower gardens for the West, for damp or wet spots, and for butterflies and birds.

You'll find information on starting a forest-floor garden; soil testing; growing wildflowers under difficult trees; getting rid of weeds without using chemicals; coping with drought; choosing plants; and butterfly and bird biology.

Photographs vary among close-ups of individual wildflowers, views of wildflower gardens, and series showing the same garden throughout a season or a year. In the meadow garden chapter is an excellent four-page photo spread showing Dr. Robert Lyons's "fast, weed-free way to grow a flowery meadow," progressing from seeds to six weeks after transplanting. Except for a couple of out-of-focus shots and one of an evening primrose that is upside down, the photos are very good.

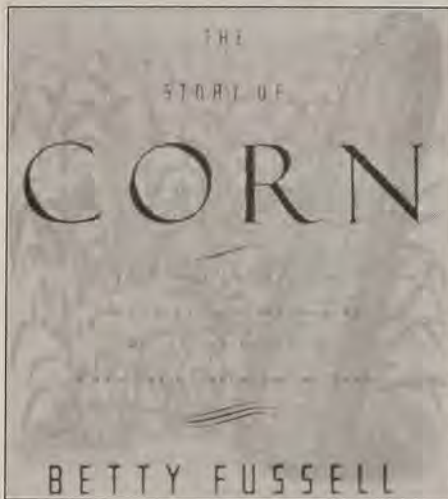
Wilson's advice is based on his own experiences creating a wildflower garden at his home in South Carolina and 20 years gardening in California. For nine years he has been a host of the PBS television series, "The Victory Garden." But Wilson doesn't rely just on his own background; he asks other experts for their advice. He cites prairie research at the University of Wisconsin Arboretum and relates the recommendations of Dr. Virginia M. Kline, the arboretum's ecologist and research program manager. He talks with Lorrie Otto, a Milwaukee resident who organized some of the first conferences on wildflower conservation in Wisconsin and who turned her front yard into a "prairie-flower sanctuary and a place for neighborhood children to learn the wildflowers" in 1970.

The last chapter is a series of regional plant lists. Here too Wilson has enlisted the help of regional experts including staff of the New England Wild Flower Society, the Chicago Botanic Garden, and the Minnesota Native Plant Society as well as nursery owners, prairie specialists, and landscape architects. Lists are arranged a bit differently in each region—some by season, some by type of habitat, some by color—but all contain the botanical and common names and brief notes on cultivation.

Wilson's writing is a pleasure to read and the appendices—which include information on how to buy meadow seeds, mail-order sources, and a list of state, regional, and national wildflower societies—will be a valuable reference.

If you've longed for a wildflower garden, but didn't quite know how to begin, *Landscaping With Wildflowers* will start you on the right path.

—Mary Beth Wiesner, Assistant Editor



The Story of Corn

Betty Fussell. Alfred A. Knopf, New York, 1992. 448 pages. 8 1/2" x 9 1/4". Black-and-white photographs and illustrations. Publisher's price: hardback, \$30. AHS member price: \$25.50.

If you can't make it to AmeriFlora '92 in Columbus, Ohio, here's an enjoyable and edifying way to pay homage to the intersection of the New and Old Worlds that began after the voyage of Christopher Columbus 500 years ago.

Perhaps this book doesn't have everything, but it wasn't for lack of trying. New Yorker Betty Fussell began her corn odyssey researching previous books on traditional American cooking, and followed its trail to her ancestral homes in Nebraska, Kansas, and Iowa. There she found, as she puts it, that "corn was everywhere and everything was corn." Edible corn for humans makes up less than one percent of the 200 million metric tons that our country produces each year. Among the products it touches are insecticides, lipstick, rubber tires, embalming fluid, surgeon's gloves, dynamite, penicillin, and aluminum.

Fussell gives us religion, art, poetry, and cannibalism among the natives of Central and South America. We find the origins of corn's cultivation in south central Mexico some 7,000 to 8,000 years ago. We learn that the Europeans viewed corn as a sort of distorted wheat. The French called it Turkey wheat; the English called it Indian corn, but to them, corn meant grain in general and wheat in particular, according to Fussell.

The book delves into science and technology. "Corne is a marvelous strange plant" in its sex life, with its seeds growing one place and its flowers another. "But to understand the implications of this sexual division, the botanist had first to 'discover' that plants in general had a sex life," writes Fussell. Much of what Fussell's botanist father told her as a child about corn

anatomy was jabbawocky at the time, she says; she prefers vivid metaphors, such as describing a corn plant's brace roots as looking like a ballet dancer's tutu.

We learn about the "Corn War" between two geneticists who fought a heated theoretic battle about the evolution of corn, and relive the corn-leaf blight of 1970, which awakened Americans to the fact that excessive hybridization had left our crops extremely vulnerable.

Still think corn is for eating? Okay, there's Orville Redenbacher's popcorn, Kellogg's Corn Flakes, Cracker Jacks, Native American piki bread, succotash, hominy, creamed corn, corn fritters, chowders, grilling in the husk or out. This is a food author, after all. You can also find a recipe for moonshine, if you're thirsty.

But for a true measure of the impact corn had on at least parts of this country, read about the heartland's sweet-corn festivals, husking contests, and South Dakota's corn palaces. These palaces were up to 100 feet tall with cupolas, flying buttresses, pinnacles and turrets, imitation stained glass, all made of corn and other grain. And Fussell, a self-described "migrant bicoastal American," was able to be hysterically funny writing about farm families without being condescending. This here Kansan thinks that alone should make her book worth buying. —Kathleen Fisher, Editor

Book Order Form

Please send me these books at the special AHS member prices.

- The Folklore of Trees and Shrubs \$21.20
- Landscaping With Wildflowers \$29.75
- The Story of Corn \$25.50

I would like to order _____ books.

Postage and handling: \$2.50, first book; \$1.50, each additional book. Virginia residents add 4 1/2% sales tax. Please allow six weeks for delivery. Prices are subject to change without notice.

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Gardeners' Dateline

Mid-Atlantic

◆ **July 12 and 26. Bonsai Demonstration.** Yoshimura Center, U.S. National Arboretum, Washington, D.C. Information: (202) 475-4857.

◆ **Aug. 6. Aquatic Gardening Slide Lecture and Walk.** U.S. National Arboretum, Washington, D.C. Information: (202) 475-4857.

◆ **Aug. 10-11. Life Lab Science Workshop.** Children's educational program. River Farm, Alexandria, Virginia. Sponsored by the American Horticultural Society. Information: (703) 768-5700.

◆ **Aug. 27. Native Plant Symposium.** The Irvine Natural Science Center, St. Timothy's School, Stevenson, Maryland. Information: (410) 484-2413.

North Central

◆ **July 11-Sept. 20. Late Summer Floral Display.** "A Passion for Purple." Foelinger-Freeman Botanical Conservatory, Fort Wayne, Indiana. Information: Foelinger-Freeman Botanical Conservatory, 1100 South Calhoun Street, Fort Wayne, IN 46802, (219) 427-1267.

◆ **July 23-25. American Sod Producers Association's Summer Convention and 25th Anniversary Celebration.** Chicago, Illinois. Information: American Sod Producers Association, 1855-A Hicks Road, Rolling Meadows, IL 60008, (708) 705-9898.

◆ **Aug. 1. Herb Fest.** Fernwood, Niles, Michigan. Information: Fernwood, 13988 Range Line Road, Niles, MI 49120, (616) 695-6491 or (616) 683-8653.

◆ **Aug. 1, 8, 15, and 22. The 10th Annual Organic Farm Tours.** Throughout Ohio. Information: Philip Hale, 559 West Main Street, Wilmington, OH 45177, (513) 382-2200.

◆ **Aug. 9-12. The 20th Annual Conference of the American Horticultural Therapy Association.** "Exploring the People Plant Connection." Ohio State University, Columbus, Ohio. Information: (800) 634-1603.

Northeast

◆ **Through Sept. 15. New World Plants in Europe and Israel.** Exhibit. Rodef

Summer Events at River Farm

Escape from the sultry summer heat into the air-conditioned oasis of the River Farm Art Gallery, where AHS will present two art exhibits of interest to plant lovers and art aficionados alike. Gallery hours are Monday through Friday, from 9 a.m. to 5 p.m.

In the gallery from June 30 through July 31, "East Coast Realists" will feature the floral, landscape, and still life paintings of 16 regional artists. Meet the artists at an opening reception from 5 to 7 p.m. on June 30th; cost is \$10 and proceeds will benefit the AHS education fund. The exhibit is free.

"Seascapes of Maureen Paige," a one-woman exhibit of paintings capturing the tenuous beauty of life amid the dunes, will be on display from August 5 until September 8. Admission is free.

For more information, contact the American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308, (703) 768-5700 or (800) 777-7931.

Shalom Biblical Botanical Garden, Pittsburgh, Pennsylvania. Information: Irene Jacob, (412) 847-0514.

◆ **July 7-9. Perennials Short Course.** Pittsburgh Civic Garden Center, Pittsburgh, Pennsylvania. Information: (412) 441-4442 or (412) 392-8540.

◆ **July 11. Lily and Summer Garden Show.** Tower Hill Botanic Garden, Boylston, Massachusetts. Information: (508) 869-6111.

◆ **July 16. The 45th Annual Open House and Garden Day.** Camden, Maine. Information: Margaret McLeod, 22 Limerock Street, Camden, ME 04843, (207) 236-4725.

◆ **July 23. Herbal Cosmetics Workshop.** Plimoth Plantation, Plymouth, Massachusetts. Information: Public Relations, (508) 746-1622, ext. 206.

◆ **July 26-28. Cold Climate Gardening Workshop.** Burlington, Vermont. Information: National Gardening Association, 180 Flynn Avenue, Burlington, VT 05401, (802) 863-1308.

◆ **Aug. 1. Summer Garden Day.** Old Sturbridge Village, Sturbridge, Massachusetts. Information: (508) 347-3362.

◆ **Aug. 10-12. Annual Meeting of the Eastern Native Plant Alliance.** Connecticut College, New London, Connecticut. Information: Joan Faust, (203) 637-3725.

◆ **Aug. 14-16. National Organic Farmers Association 18th Annual Summer Conference.** Hampshire College, Amherst, Massachusetts. Information: Julie Rawson, 411 Sheldon Road, Barre, MA 01005, (508) 355-2853.

◆ **Aug. 15-16. Victorian Flower Extravaganza.** Display. Park-McCullough House, North Bennington, Vermont. Information: (802) 442-5441.

Northwest

◆ **Aug. 8-12. Healthy Plants, Healthy Planet.** Joint meeting of the American Phytopathological Society and Mycological Society of America. Information: Joan M. Schimmi, (612) 454-7250.

South Central

◆ **Through July 30. Ephemeral Bounty.** An exhibition of watercolors by Annie Laurie Dodd. State Botanical Garden of Georgia, Athens, Georgia. Information: State Botanical Garden of Georgia, 2450 South Milledge Avenue, Athens, GA 30605, (404) 542-1244.

◆ **July 9-12. Seventh Annual Herb Growing and Marketing Conference.** Fort Worth, Texas. Information: International Herb Growers and Marketers Association, 1202 Allanson Road, Mundelein, IL 60060, (708) 566-4566.

Southeast

◆ **July 22. Practical Approaches for Effective Erosion and Sediment Control.** One-day course. Atlanta, Georgia. Sponsored by the International Erosion Control Association. Information: Tracy, IECA, P.O. Box 774904, Steamboat Springs, CO 80477, (303) 879-3010, Fax (303) 879-8563.

◆ **July 23-25. Native Plants in the Landscape.** Annual Conference. Cullowhee, North Carolina. Information: Sue DeBord, Division of Continuing Education, Western Carolina University, Cullowhee, NC 28723-9018.

◆ **July 25. Summer Plant Fair.** Marie Selby Botanical Gardens, Sarasota, Florida. Information: Spencer Ketchum, (813) 366-5731.

◆ **Aug. 8. International Water Lily Conference.** Atlanta Botanical Garden, Atlanta, Georgia. Information: Carol Flammer, (404) 876-5859.

◆ **Aug. 16-19. Florida Foliage Association's Annual Meeting.** "Back to the Basics." Jupiter, Florida. Information: Ann King, FFA, P.O. Box 2507, Apopka, FL 32704-2507, (407) 886-1036.

◆ **Aug. 28-30. Gardening Southern Style: Black-eyed Peas and Collard Greens.** Callaway Gardens, Pine Mountain, Georgia. Information: National Gardening Association, 180 Flynn Avenue, Burlington, VT 05401, (802) 863-1308.

Southwest

◆ **July 27-Aug. 7. Garden Design Course.** Aspen, Colorado. Offered by the College of Garden Design, Somerset, England. Information: Maggie Guitar, (915) 673-1320.

◆ **Aug. 28-30. Sunflower Harvest Festival.** Denver Botanic Gardens, Denver, Colorado. Information: (303) 370-8020.

West Coast

◆ **July 2. Palms for the Home Garden.** Lecture. The Huntington, San Marino, California. Information: Lisa Blackburn, (818) 405-2140.

◆ **July 13-24, Aug. 3-14. Green Stuff! Day Camp.** Children's programs. University of California Botanical Garden, Berkeley, California. Information: (510) 642-3352.

◆ **July 18-Aug. 8. Perennials on the Pier.** Pier 39, San Francisco, California. Information: (415) 705-5500.

◆ **July 25-27. The 25th Anniversary Celebration of UCSC Farm and Garden.** University of California-Santa Cruz, Santa Cruz, California. Information: Ann Lindsey, (408) 459-3248.

◆ **July 25-Aug. 9. Sonoma County Fair Flower Show.** "Through the Looking Glass." Information: Sheila Quince, (707) 545-4203.

◆ **Aug. 3-4. Horticultural Exhibit.** Honolulu, Hawaii. Held in conjunction with the annual meeting of the American Society for Horticultural Science. Information: Robin Smith, Convention Management Services, Inc., 2920 West

St. Joseph Street, Lansing, MI 48917, (517) 485-2309.

◆ **Aug. 19-24. American Begonia Society Convention.** "Captivating Canes." Anaheim, California. Information: (714) 525-7061.

◆ **Aug. 22-23. Seventh Annual Inter-City Cactus and Succulent Show.** Los Angeles State and County Arboretum, Arcadia, California. Information: Larry Grammer, (310) 599-1146 or Woody Minnich, (805) 944-2784.

◆ **Aug. 29. Third Annual Summer Show of Color: A Display of Water Conserving Plants for Your Garden.** Santa Barbara Botanic Garden, Santa Barbara, California. Information: Anne Steiner, (805) 682-4726.

International

◆ **July 9-11. Canadian Geranium and Pelargonium Society Conference.** Vancouver, British Columbia, Canada. Information: (604) 271-6487 or (604) 271-8321.

◆ **July 28-Aug. 6. Sixth International Congress of Plant Pathology.** Montreal, Quebec, Canada. Information: Doris Ruest, 6th International Congress of Plant Pathology, National Research Council Canada, Ottawa, Ontario, Canada K1A 0R6, (613) 993-9228, or Fax (613) 957-9828.



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MARIKO KOJIMA / COURTESY OF THE HUNT INSTITUTE

At first glance these three drawings might appear to have been reproduced from some rare 16th- or 17th-century herbal. Although classical in style, they are the work of contemporary artists featured in the Seventh International Exhibition of Botanical Art and Illustration. Presented by the Hunt Institute for Botanical Documentation at Carnegie Mellon University in Pittsburgh, Pennsylvania, the exhibition will feature 90 artworks by 86 artists from Australia, Austria, Belgium, Brazil, Canada, Denmark, England, Germany, India, Japan, the Netherlands, the People's Republic of China, Scotland, South Africa, Sudan, the United States, the former U.S.S.R., and Vietnam. Many of the works displayed are part of the Hunt Institute's permanent collection of more than 30,000 watercolors, drawings, and prints, spanning from the Renaissance to the present. A division of Carnegie Mellon University, the institute houses one of the world's largest collections of botanical literature, art, and archival materials, and has become a popular research facility among botanists, artists, and academicians. The exhibition began on April 13 and runs until July 31, Mondays through Fridays. For more information, contact Saul Markowitz, (412) 268-7565.

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HELP WANTED

AHS is often asked to refer individuals for horticultural positions. We are glad to receive résumés and cover letters of individuals seeking job changes and employers seeking candidates. Inquiries should be sent to: Horticultural Employment, AHS, 7931 East Boulevard Dr., Alexandria, VA 22308-1300.

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Join America's gardening experts for the "Great Gardeners of America" lecture series being held at AmeriFlora '92 in Columbus, Ohio. Presented by the American Horticultural Society, in association with First Community Bank of Ohio, the lecture series will continue every Saturday until October 10. AmeriFlora '92 is a showcase for American gardening. For ticket information contact: Sherran Blair, First Community Bank of Ohio, 4300 East Broad Street, P.O. Box 717, Columbus, OH 43216, (614) 239-4680.

"GREAT GARDENERS OF AMERICA" LECTURE SERIES SCHEDULE: JULY, AUGUST, AND SEPTEMBER 1992

July 4: "A New Era in Gardening—The Old and the New"

Andre Viette, president of the Perennial Plant Association, owner of *Andre Viette Farm and Nursery*, and an AHS Board Member, and *Jacqueline Hériteau*, author of *The American Horticultural Society Flower Finder*

July 11: "Gardening in Small Spaces and Containers"

Linda Yang, author of *The City Gardener's Handbook* and a garden columnist for the *New York Times*

July 18: "Wild Kingdoms of the City"

James van Sweden, landscape designer, Washington, D.C.

July 25: "New and Better Urban Trees"

William Flemer III, president of *Princeton Nurseries*, Princeton, New Jersey

August 1: "American Plants for American Gardeners"

John Elsley, horticulturist at *Wayside Gardens*, Hodges, South Carolina

August 8: "The Agony and Ecstasy of Specializing in a Holly Plant"

Jim Wilson, host of the PBS series *"The Victory Garden"* and author of *Masters of the Victory Garden*

August 15: "New Variations of Old Landscape Plants"

J. C. Raulston, director of the *North Carolina State University Arboretum*, Raleigh, North Carolina

August 22: "Native Wildflowers: Habitat Gardening for the Future"

David K. Northington, executive director of the *National Wildflower Research Center*, Austin, Texas

August 29: "Bulbs as Companion Plants"

Brent Heath, owner of the *Daffodil Mart*, Gloucester, Virginia

September 5: "The Revolution of the Vegetable Garden"

Rosalind Creasy, author of *The Complete Book of Edible Landscaping and Cooking From the Garden*

September 12: "Gardening in the Shade: Problems and Potentials"

Allen Paterson, director of the *Royal Botanic Garden in Hamilton*, Ontario

September 19: "Hours of Pleasure From Minutes of Gardening"

Elvin McDonald, AHS Secretary, author of *Northeast Gardening* and a syndicated column on house plants

September 26: "Floral Flights"

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Tansy, Rue for IPM

The April issue of *Greenhouse Manager* reported two successful strategies for combating insect pests with companion plants. Sandy Hastings of Crewe, Virginia, found that her flowering cabbage and kale stayed virtually pest-free when they were surrounded by tansy (*Tanacetum vulgare*) plants. "We never saw an aphid, even on the white varieties," she wrote.

Doug Walker, a researcher at the University of California-Davis, discovered that the common rue (*Ruta graveolens*) was extremely attractive to whiteflies. He has now been using it to control whiteflies, in combination with a parasitic wasp, *Encarsia formosa*, and as a monitor for whiteflies. If there are whiteflies in the greenhouse, he finds them on the rue first.

Friendly Fungicide

Environment-sensitive gardeners can drown slugs in beer and slip beetle grubs a dose of milky spore. But there haven't been many options for the nightmare of ugly fungal diseases.

Evidence is mounting, however, that some types of antitranspirants—sprayed on plants to prevent water loss during drought and to prevent transplant shock—are effective as fungicides as well. Some antitranspirants contain mercury, but others, made of nontoxic polymers, are both biodegradable and inexpensive.

Fungal pathogens attack by penetrating the outer surface of a plant with a needle-like projection and then secreting toxins and substances that slow the plant's growth. Plants are less susceptible if they have a waxy outer layer. Antitranspirants provide a similar protection; some of them are derived from wax extracted from plant leaves.

They have been shown effective against gray mold on chrysanthemums, and against powdery mildew on crape myrtle, hydrangea, roses, and zinnias. In some cases the protection approached 100 percent—as high or higher than fungicides.

However, these treatments may also reduce photosynthesis, raise leaf temperature, or prove toxic to plants when used in high concentrations. So far, says the *IPM Practitioner*, manufacturers have been unwilling to conduct more studies relating to the use of antitranspirants as fungicides, partly because of the high cost of complying with fungicide regulations.

Paper Plants

Greater use of recycled paper is one answer to saving trees, but recycled paper is generally more expensive or not as high in quality as first-use paper.

However, there are other plants that can be used for making paper.

A Baylor University math professor says that the residue from sorghum is an economically feasible alternative that requires less energy and chemicals than a conventional paper pulp mill.

"The technology is here," says Patrick Odell. "We've already made commercial grades of paper, including unbleached packaging for sacks, medium corrugated liner board, and bleached paper for stationery."

Another plant being considered as a paper substitute is kenaf, an African plant that can be grown in the United States anywhere that cotton is grown. It has been used to make paper pulp and cardboard.

Kenaf, like sorghum, requires less chemical treatment than wood to break down into pulp. It does not require bleaching because it is already white, says John Mayerback, crop specialist at the Tucumcari Agriculture Science Center in

New Mexico.

Agricultural Research Service studies in Oklahoma determined that two cultivars—'Everglades 41' and 'Everglades 71'—had a high percentage of stalks that would make them ideal choices for paper manufacturing.

Odell argues that sorghum has an advantage over kenaf in that thousands of acres are already being grown in the United States.

Anti-Cancer Edibles

Among the plants being studied for their anti-cancer properties are that old relish-plate standby, the carrot, and the less appreciated pawpaw.

Recent medical reports have linked slowed cancer cell growth, or even regression, to the ingestion of high levels of beta-carotene. The substance appears effective against cancer of the lung, esophagus, colon, rectum, mouth, skin, and stomach. Dr. Leonard Pike of Texas A&M University has begun selective breeding for superhigh beta-carotene content, but he says that such designer carrots are probably a decade away from the grocery shelves.

Jerry McLaughlin, a pharmacologist at Purdue University, has led research on substances called acetogenins first found in a pawpaw relative from Cuba. He has since found that acetogenins found in the common pawpaw, *Asimina triloba*, appear to suppress growth in cultured cells from leukemias, and cancers of the lung, colon, skin, ovary, and kidney.

McLaughlin says that extracts from pawpaw twigs are also effective pesticides. He's used them to kill spider mites, Mexican bean and striped cucumber beetles, mosquito larvae, and melon aphids. In an interview with *Science News*, McLaughlin noted that while the ripe fruit is edible, the unripe fruits, like the twigs, are highly toxic.



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