

WILDFLOWER

A non-profit organization committed to the preservation and reestablishment of native wildflowers, grasses, shrubs, and trees.

HOW TO HIRE A GARDEN DESIGNER

The long days of summer are the perfect time to linger in your favorite garden spot with iced coffee or lemonade and evaluate your gardening successes, concede the failures, and make plans for your landscape's future. If your ideas grow beyond adding a few plants here and there, you may want to consider hiring a garden designer.

Remember that landscaping has three basic phases: design, installation, and maintenance.

A good design provides the foundation for a healthy landscape. Your design can be a master plan for implementation in phases, as your time and budget allow.

Without proper installation, plants won't thrive in their new home. Design and installation directly influence how easy or difficult the garden will be to maintain. Landscaping with native plants helps reduce time spent on your maintenance routine, which leaves you more time to enjoy just being in your garden.

As with any investment, it's wise to do some homework before hiring a contractor to work for you.

Landscape designers

offer a variety of services, many specialize in a specific area, such as design using native plants, water-conserving irrigation, and landscape lighting.

If you want to revamp your landscape, you can pursue your new look in several ways.

- You can hire a designer to develop a landscaping plan and install the plants yourself. If you're comfortable working with plants and have the time and inclination to work in your garden but don't know which plants are available in the nursery trade, this is a good choice.

- Obtain a design, then ask for bids to have someone else do all the work for you. Going out for bid will help you get a competitive price. Remember that the biggest is not always the best — in most cases you do get what you pay for. Big companies may be efficient because they have a large labor force, but a smaller company may offer more personalized service.

- Hire a company to do both the design and installation. Make sure you're getting the plants you really want, and not just the ones they want to move out of

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WHAT IS THE DIFFERENCE BETWEEN LANDSCAPE DESIGNERS AND LANDSCAPE ARCHITECTS?

Landscape designers tend to be "plant people." Often they are horticulturists who understand the requirements of plant growth such as soils, light, plant maintenance levels, entomology, and plant pathology. They create garden spaces by using plants to accent light, form, texture, and colors. Landscape designers work independently or in conjunction with local nurseries. Many have formal education, but you don't have to have special training to call yourself a landscape designer.

A landscape architect must pass the Landscape Architect Registration Exam — except in California, which will start to administer its own test

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Visit the autumn desert of the Big Bend with us!

Join the Wildflower Center on a special six-day trip to the Texas Big Bend, Sept. 9 to 14.

We'll meet in El Paso and, on the way to the Big Bend, explore the Davis Mountains and visit the McDonald Observatory for a star party.

As we explore the

flora of Big Bend National Park, we'll have a special guide — noted naturalist Dr. Barton Warnock, who has studied Chihuahuan Desert flora for more than 30 years.

Plus, we'll float for a day down the Rio Grande through the Santa Elena Canyon.

Cost per person, dou-

ble occupancy, not including airfare to El Paso and return, is only \$1199. For more information, please call Tela Mänge or Flo Oxley at (512) 929-3600.

To reserve your spot, send a \$100 deposit per person to: Big Bend Trip, 2600 FM 973 N, Austin TX 78725.

Director's Report

Making the Earth a better place, one child at a time

*Treat the Earth well.
We did not inherit it
From our parents.
It is being loaned to us
By our children.*

This is one of my favorite quotes. It expresses a deep respect and love for the land, a philosophy shared by essentially all early cultures that depended directly on the land for their survival.

As important as it is for us to do all we can to give our children a cleaner and better protected Earth than we now have, it is even more important that they develop a different attitude toward the Earth than most of us had. From what we have seen of the children who come to the Wildflower Center, this will be a much easier task than one might imagine.

Already, today's children are more aware and more conscientious about recycling, not littering, and conserving water than children of even ten years ago. Today's children

are better educated and more aware of the problems facing our environment and are eager to be part of the solution. It's exciting to see!

As we plan to significantly expand educational activities for all ages at our new facility, we are concentrating on children's programs. The new facility will have a 1,000-square-foot Children's Activity room, an adjoining 600-square-foot outdoor project area, and two additional 1,200-square-foot classrooms for a wide variety of hands-on activities, demonstrations, films, and educational resources.

Our gardens will have a plant "petting zoo" that will allow children to experience the various textures and scents characteristic of native plants, a pollinator garden that will demonstrate the complex interactions between native plants and animals, and other gardens that will supplement learning activities for our younger visitors. Additional programs will include regularly changing activities for weekly drop-in visitation, organized school

trips, and summer day camps.

Our goal is twofold: We want our young visitors to be aware of the importance of native flora in the natural world, and we want them to develop a sense of personal involvement in improving the world. Of course, this is our mission for all age levels.

We are expanding our fund-raising plans and hope to raise the \$2 million still needed during the next 12 months.

We look forward to welcoming more of our younger visitors. When it is their turn to borrow this Earth from their own children, it should be a much different one than we have on loan. The staff of the National Wildflower Research Center is excited about their role in bringing about those improvements!



David K. Northington, Ph.D. is executive director of the National Wildflower Research Center.

Wildflower

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WILDFLOWER CENTER NEWS

Mark your calendars for **August 12** and watch for your invitation to our annual **Membership Open House!** We'll be screening our new video, "Seeds for Tomorrow." The video was funded by a generous grant from the Day Foundation, which Center Trustee Deen Day Smith oversees. Come beat the heat with an ice cream social on the Center grounds!

Research Assistant **Marcia Hermann** is overseeing plant rescues at the Wildflower Center's new site, moving plants that could be damaged during construction and saving them to be replanted once construction is completed. Thanks to the hard work of Marcia and her crew, the Center will save a lot of money on landscaping — and the plants will be more mature than what we could have purchased!

Special thanks to the Wyndham Hotel, Mama's Muffins, and Texas French Bread for underwriting a special reception during the annual Wildflower Days Festival in April. Three astronauts from the Space Shuttle *Discovery* presented

Lady Bird Johnson with wildflower seeds they carried into space. Participating in the ceremony with Mrs. Johnson were Retired Marine Col. Jim Buchli, Army Lt. Col. Sam Gemar, Navy Capt. Ken Reightler, and Hans Mark, former deputy administrator of NASA.

Media coverage of Wildflower Center activities has been terrific this year. By the time *Wildflower* reaches your door, you may have seen Mrs. Johnson with **Charles Kuralt** on the "CBS News Sunday Morning" show, in *TIME* magazine, the *Washington Post*, the *New York Times*, *Ms.* magazine, *Town and Country* magazine, the *Detroit Free-Press*, the *San Francisco Examiner*, and *VICTORIA* magazine.

More than 1,500 children visited the Center this spring! Volunteer Coordinator **Peggy Budd** supervised the efforts of many staff and volunteers who worked to create a memorable outing for all the kids, who received tours and presentations geared to their level of understanding. Many enjoyed picnic lunches under our shade trees.

Wild or propagated? We need answers

Editor's note: Faith Thompson Campbell, Ph.D., a senior research associate with the Natural Resources Defense Council in Washington, D.C., has led the fight to protect native plants in the United States and in foreign countries.

Environmentally concerned gardeners wish to avoid buying plants that have been dug from the wild, but governmental regulations make it difficult to determine plant origins.

Because of the lack of regulation of plant collecting at the state or federal level, we don't know exactly how many wild-collected plants are sold by U.S. mail-order nurseries and roadside garden centers. However, when all types of plants are considered, the total number taken from the wild may well reach several million plants each year.

Unfortunately, the Federal Trade Commission's *Guides for the Nursery Industry* actually encourage nurseries to label plants taken from the wild as "nursery grown" — as long as they are maintained for as little as one growing season.

The length of time wild-collected plants remain in a nursery — a single growing season or several years — is irrelevant to the impact of the original collection on wild populations. Over-collection can threaten the survival of some native plant species or make them much more difficult to find in the wild.

To correct this situation, nine environmental organizations, nurseries, and a professional nursery association, petitioned the FTC in 1991 to amend the *Guides*:

Natural Resources Defense Council, California Native Plant Society, Environmental Defense Fund, Garden Club of America, Mt. Cuba Center for the Study of Piedmont Flora, National Audubon Society, Native Plant Society of Oregon, New England Wildflower Society, TRAF-FIC (USA), Native Gardens of Greenback, Tennessee, Niche Gardens Nursery of Chapel Hill, North Carolina, Montrose Nursery of Hillsboro, North Carolina, and the American

Association of Nurserymen.

The petition asks that the guidelines be amended to:

- Eliminate confusion and possible deception about the original source of the plant material;
- Make the guidelines conform with standards applied to international law — and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and
- Eliminate the unfair competitive advantage enjoyed by nurseries that sell relatively cheap wild-collected plants instead of more expensive propagated ones.

The FTC has not acted on the petition, perhaps because staffers don't believe that there's strong enough interest in learning the true origin of plants offered for sale. Environmentalists and gardeners must convince them otherwise.

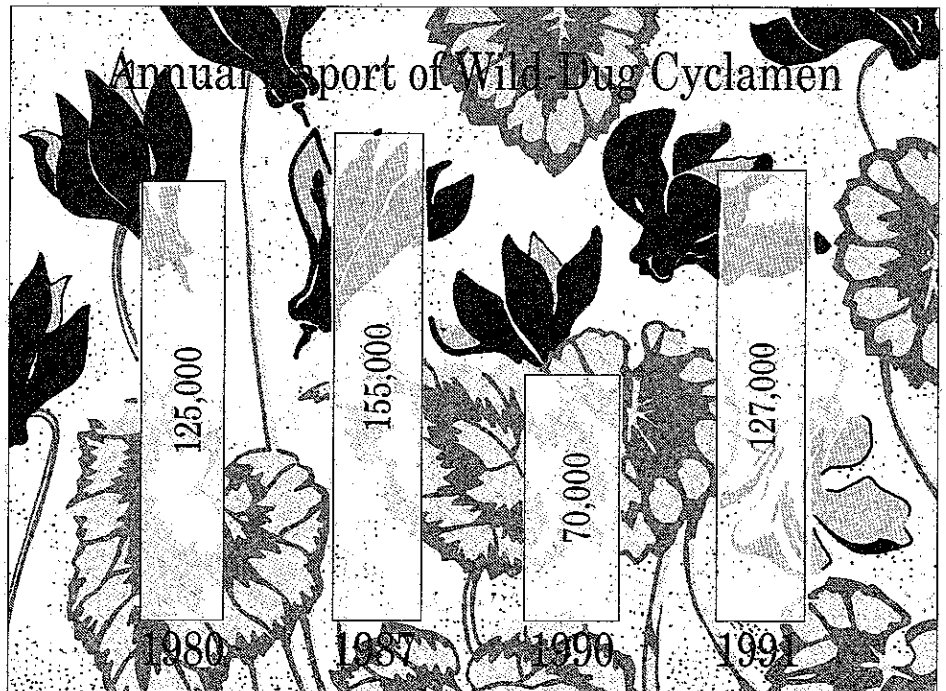
To some extent, voluntary agreements have helped fill the void. The Dutch bulb industry now labels bulbs as wild-collected or propagated, and the Mailorder Association of Nurserymen has adopted a labeling code of ethics. But neither agreement can be legally enforced in the United States, so American dealers

remain free to make misleading claims about the origin of the bulbs and wildflowers they sell.

In the mid-1980's, U.S. dealers annually imported between 100,000 and 150,000 wild-dug cyclamen. In 1987 alone, the U.S. imported 4 million snowdrop bulbs, probably 70 percent of which had been wild-collected from Turkey, and at least 155,000 cyclamen.

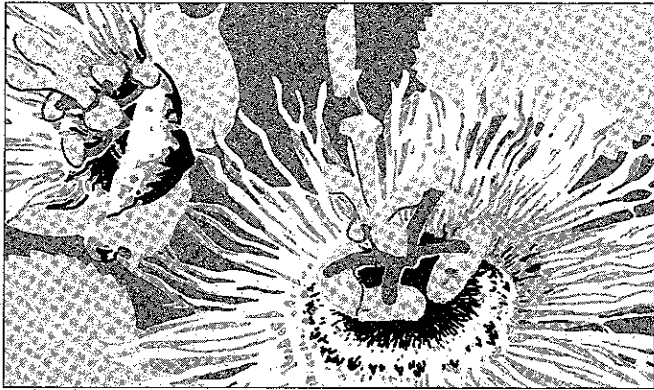
By 1989, various factors began cutting into the demand for commonly wild-collected plants such as cyclamen and snowdrop. In 1990, the U.S. imported about 700,000 snowdrops and nearly 70,000 cyclamen that had been wild-collected in Turkey. By 1991, U.S. imports of wild-collected snowdrops had dropped another 45 percent — to 387,000 bulbs; but imports of wild-collected cyclamen rose 80 percent to 127,000 corms.

It's clear that efforts to educate the public not to buy wild-collected plants are working. If you think it's time that the U.S. Government helped rather than hindered gardeners' efforts to find out if plants have been propagated or dug from the wild, write to the FTC and urge action.



Wildflower

NOTEBOOK



Botanical Name: *Passiflora incarnata*
Pronunciation: pass-eh-FLOOR-ah in-kar-NAH-tah
Common Name: Passionflower, Maypop
Family Name: Passifloraceae (Passionflower family)
Range: Southwestern Pennsylvania to Maryland, south to Florida, west to Texas, north to Oklahoma, Missouri, Illinois, Indiana, and Ohio

Habitat: Sandy thickets and open areas, fields, edges of woods, and along streams
Bloom Period: June through September

The passionflower is one of nature's most striking and unusual wildflowers.

Called *flor de las cinco llagas*, or flower of the five wounds, by early Jesuit missionaries, this plant was be-

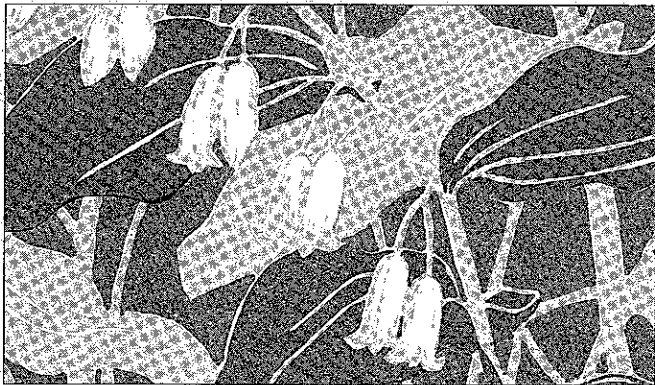
lieved to have important religious connotations and symbolized faith and piety. The floral parts symbolically represent the Passion of Christ. The five sepals and five petals represent the ten faithful apostles; Peter, who denied Christ, and Judas, who betrayed Him, are excluded. The fringe represents the crown of thorns, the five stamens symbolize the five wounds; the ovary represents the hammer, and the three stigma signify the three nails used to hang Christ from the cross.

Although potentially harmful in large amounts, Native Americans and early settlers used the passionflower medicinally. Native Americans made a poultice with roots to soothe bruises, boils, cuts, and earaches. Early pioneers made a soothing eyewash and used the plant to treat insomnia, ten-

sion headaches, and epilepsy.

Passionflower, a quite attractive landscape vine, can be propagated from seeds or carefully collected stem cuttings. Seed germination, however, is slow, requiring up to two years. In addition, only a very small percentage of seed is actually viable.

A better way is to propagate the plant from stem cuttings. Begin with cuttings that are approximately six to eight inches in length and remove the lower leaves. Plant the cuttings in a well-drained medium, making sure that one node of each stem is buried in the medium. Keep the cuttings under mist until a good root system is established. Transplant rooted cuttings to rich well-drained soil under full sun and ENJOY!



Scientific Name: *Polygonatum biflorum*
Pronunciation: poe-hg-oh-nat-um buy-floor-um
Common Name: Solomon's Seal, sealwort
Family: Liliaceae (Lily family)
Habitat: Moist wooded slopes, stream banks and

slightly acidic soils
Range: Northeastern U.S. and Ontario, west to Nebraska, south to Florida and Texas
Bloom Period: March through June

A wildflower rich in history and folklore,

Solomon's seal is a subtle beauty. Found in moist acidic soils, this plant is named after King Solomon, a renowned herbalist. The circular rootstock scars, caused by the death and withering of the flowering stem, are believed to resemble the king's royal seal.

A perennial that develops from a stout rhizome, the slender unbranched stem is eight to thirty-six inches tall and usually arches. Pale green leaves, elliptically or ovately shaped with tapering ends, are nearly always clasping the stem. The leaves are conspicuously veined and light green underneath.

Flowers are light green to yellow, tubular in shape, and approximately one-half

to one inch in length. Stalks attached to the stem at the axils support clusters of one to three flowers. The berry that develops is dark blue. The placement of the flowers along the length of the stem differentiates Solomon's seal from False Solomon's seal (*Smilacina*) which has flowers located at the stem's apex.

Folklore has credited Solomon's seal with various uses. American Indians used the crushed root to cure wounds and poison ivy, and to remove the black and blue coloring from bruises. Teas were used to relieve stomach irritations. It was even thought that spreading the plant on the floor of the home would ward off spiders and snakes.

FROM THE
FIELD

Crested Butte Wildflower Festival, July 12-17, Crested Butte, CO.
Contact: Crested Butte Chamber of Commerce, P.O. Box 216, Crested Butte, CO 81224.

Landscaping with Native Plants (Cullowhee Conference), July 21-24, Cullowhee, NC. **Contact:** Registration Office, Western Carolina University, Cullowhee, NC 28723, (704) 227-7397.

Rhode Island Highway Plantings: Practice & Policy, July 27, Rhode Island. **Contact:** Rhode Island Wild Plant Society, 12 Sanderson Rd., Smithfield RI 02917, (401) 949-0195.

Ecology and Global Sustainability, July 31-Aug. 4, Madison, WI. Annual meeting of the Ecological Society of America. **Contact:** Dennis Whigham, Smithsonian Environmental Research Center, Box 28, Edgewater, MD 21037, (410) 798-4424.

Grasslands, Aug. 1-5, Ames, IA. Annual meeting of the American Institute of Biological Sciences. **Contact:** Louise Salmon, AIBS, 730 11th St. NW, Washington, DC 20001, (202) 685-1500.

Ecology, Restoration, and Management of Prairie Wetlands, Aug. 9-13, Jamestown, ND. **Contact:** Dr. Ned H. Euliss Jr., U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, Route 1 Box 96C, Jamestown, ND 58401-9736, (701) 252-5363.

Invasive Exotic Plants, Aug. 12-13, Blacksburg, VA. Co-sponsored by the Virginia Native Plant Society, Dept. of Conservation and Recreation—Division of Natural Heritage, Virginia Polytechnic Institute & State University's Dept. of Horticulture. **Contact:** VNPS, P.O. Box 844, Annandale, VA 22003, (703) 231-5783.

Return of the Natives, Aug. 26, Stevenson, MD. Native plant symposium. **Contact:** Irvine Natural Science Center (410) 484-2413.

Landscape architects, designers *continued from page 1*

this year. Forty-four states require landscape architects to have a license to practice. Qualifications and laws vary from state to state, but all require a certain level of education, experience, and exams.

Landscape architects tend to specialize in residential, commercial, or institutional projects. They have a broad background that includes more of the hard-scape aspects of landscaping, including

retaining walls, fountains, grading, and drainage, as well as legal issues. They should be consulted when any type of potential liability is involved. Many, but not all, landscape architects possess extensive knowledge about plant growth requirements.

Landscape architects usually charge more for their services.

— Denise D. Delaney

Plant a concern for the environment in the children you love!

You can sow the seeds of learning about the environment early with these children's books about plants. Interesting legends, beautiful illustrations, and mind-opening experiments combine to make these selections not only educational but fun for summer reading.

• **Looking at Plants** David Suzuki
Travel petal-by-petal, twig-by-twig, and leaf-by-leaf, into the fascinating world of green and growing things. Filled with exciting projects and activities for ages 5-10. Illustrated. 96 pages. Paperback. \$9.95

• **Cactus** Carol Lerner
A well-respected naturalist looks at a distinctive group of plants, explaining their physical characteristics and adaptive abilities — and rendering the stark beauty of the cactus family in watercolor detail. Ages 9-12, 32 pages. Hardback. \$15.00

• **The Legend of the Bluebonnet** Tomie DePaola
Internationally acclaimed artist and author tells this favorite legend based on Comanche lore. Full-color illustrations accompany a moving tale. Ages 3-6, 32 pages. Hardback. \$14.95

• **Growing Wild. Inviting Wildlife into Your Yard** Constance Perenyi's beauti-

fully illustrated book teaches children, with adults, the importance of native plants, and the beauty and wonder of the wildlife they attract. Includes garden projects and resource guide. Ages 5-8, 40 pages. Paperback. \$9.95

• **Plant Families** Carol Lerner
A fascinating introduction to the world of plants. Lerner examines twelve of the world's largest and most familiar plant families. Striking drawings, focusing on plant parts and identification. Good teaching reference! Ages 9-12, 32 pages. Hardback. \$14.00

• **Eyewitness Books. Plant** David Burnie
Discover the world of plants close-up—their structure, natural history, and importance in human life. A mini-encyclopedia on the plant, with articles ranging from seed production and self-defense, to fruit makers and light requirements. Hundreds of photographs. Ages 9-12, 64 pages. Hardback. \$15.00

To order any of the above books, please use the order form on this page (or a photocopy!), and mail to the Center Remember — members receive a ten percent discount on all purchases

Use this form (or a copy!) to order any of the books above. Make check payable to NWRC and mail with form to: **NWRC BOOK ORDERS**, 2600 FM 973 NORTH, AUSTIN, TX 78725-4201. Or call (512) 929-3600, from 9 a.m. to 4 p.m. Central Time weekdays, for credit card orders only.

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Shipping (1-2 books: \$3.00, 3 books: \$4.00)+ _____

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New support group, the Wildflower Associates, sponsoring fund-raising party on October 16!

The Wildflower Center's 1993 fall party has been set for Saturday, October 16, in Austin. Jerry Jeff Walker, a favorite performer of President Bill Clinton, will entertain at the country casual affair with songs such as "Mr. Bojangles," "L.A. Freeway," and "Hill Country Rain."

The University of Texas Alumni Center's many decks and patios will provide guests with ample opportunity to enjoy the cool fall evening. Catering By Rosemary promises to provide some superb regional Texas

country fare.

This year's fabulous event, planned and executed by the Center's new Wildflower Associates, will cost \$50 per person, and each party-goer will receive a one-year complimentary membership in the Wildflower Center. Underwriting opportunities, including a pre-party reception, are available.

The party will include a silent auction. Available items include a complete landscaping plan by landscape architect Bob Anderson,

who designed the landscaping for the new Wildflower Center site, and a baseball autographed by Texas Rangers pitcher Nolan Ryan.

The Wildflower Associates group hopes the party will add hundreds of new members to the Center's rolls — and put thousands of dollars in our coffers!

If you'd like to receive an invitation to the event or offer your financial support, please contact the Development Department at (512) 929-3600.

Hiring a landscape contractor

their own nursery

Before you get started, you'll need to decide what you want to get out of your garden space. Are you trying to attract wildlife? Provide an area for kids to play? Do you plan to entertain in the evenings? Do you want privacy? Collect gardening magazines with pictures of gardens you like, so you can show your consultant what you have in mind.

Study your property. Watch for drainage problems during or after a heavy rain. Learn your soil type. Watch the sun throughout the day to find your garden's sunny and shady spots. Visit your local botanical

garden to get inspiration. Ask questions, take notes. Be prepared.

Ask friends to recommend a designer. If they're happy with the work done, chances are, you will be, too.

Interview the contractor. Find someone who understands your gardening style and will work with it. Ask about the scope of the work they do. Do they focus on residential or commercial design? Ask how long they've been in business. What formal training or education have they had?

Know how much money you're willing — and able — to spend, and be flexible. Ask how they charge for their services. You might not be able

continued from page 1

to afford to install the entire plan at once, but you could do it in phases. Check references, and get a written contract.

Plants are expensive because they are a living, growing product that must be continually maintained and cared for. Hiring someone who knows how to select healthy plants will save you money in the long run.

A good garden design that is installed and maintained properly will offer a special place to relax.

*Denise D. Delaney
Horticulturist
National Wildflower Research Center*

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Wildflowers Work!

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