

Kids' KOrner

Butterfly Gardening Attracts Fancy Fliers

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National Geographic
News Service

WASHINGTON, D.C. — Marian Stern scoops up two potted buddleias, called "butterfly bushes" because they're irresistible to the gaudy insect.

"One's for my mother, one's for me," she says at a Washington-area nursery. "My whole neighborhood's into butterflies."

The ubiquitous butterfly, long taken for granted in the United States — North America is home to some 700 species — has new cachet. Attracting butterflies, whose names are as fancy as their colors, has become a gardening trend.

The notion of a back yard alive with great spangled fritillaries and black swallowtails is compatible with the latest gardening techniques.

It has become increasingly popular to use fewer chemicals, lure wildlife with plants and grow old-fashioned cutting flowers, like cosmos and hollyhock, which butterflies prefer. Finding nectar in the single blossoms of these turn-of-the-century favorites is easier than in the cabbagelike blooms of many modern hybrids.

"It didn't take a rocket scientist to see the butterfly garden coming," says Doug Jimerson, gardening editor of Better Homes and Gardens magazine, which featured butterflies on its May cover.

The promise of a quick payoff also helps drive the trend. A garden plot as small as a crib mattress can lure painted ladies and skippers the first year. What's required are plenty of fragrant, funnel-shaped flowers, splashes of purple — and no chemicals.

Novice butterfly gardeners look for a simple approach, says Jill Gonzales of Behnke Nurseries Co., one of the largest plant marketers in the Washington-Baltimore area. "They want low-maintenance plants that produce flowers

most of the summer," she says. "More often than not, we send them home with a buddleia."

Buddleia has become the unrivaled star of the butterfly-garden trend. The fast-growing, airy shrub sends up cluster after cluster of flowers that are magnets for monarchs or painted ladies cruising the neighborhood.

Fascination with butterflies sometimes surfaces where it's least expected. Ed Gould, a curator at the National Zoological Park in Washington, noticed that visitors were as enthralled by butterflies flitting outside the cages as they were by the animals inside.

"I'd see parents saying to a kid, 'Look at that zebra,' he says, 'while the kid was saying, 'Look at that butterfly.'"

Gould, who has a large butterfly garden at home, persuaded zoo administrators to add plants around the wild-animal exhibits that would attract even more butterflies. Signs were erected explaining the relationship between a particular plant and a butterfly species.

"Those signs were so popular that we put up another one just about butterfly gardening," Gould tells National Geographic. "You'd be surprised how many people stop to read it."

The butterfly-garden phenomenon hasn't been lost on businesses. The Chevron Corp. makes much of the sand dunes it preserves for a dime-size endangered blue butterfly near Los Angeles. Other companies go out of their way to protect sulfurs, checker-spots and other common butterflies.

"Half of our certified sites include butterfly habitat," says Darlene Pais of the Wildlife Habitat Enhancement Council, a Washington-based organization of industries that conserve wildlife on their grounds.

E.I. du Pont de Nemours & Co.

created a butterfly garden three years ago at its experimental station in Wilmington, Del. "It was just 70 square feet, but our employees loved it," says Betty Jean Daisey, who helped plan the project. "Many of them put in butterfly gardens at home."

Inevitably, the butterfly boom has created a business all its own. Charmed by thousands of butterflies attracted to his Florida patio, Ron Boender dreamed up Butterfly World, which opened near Fort Lauderdale five years ago. The tropical butterfly zoo is patterned after "butterfly houses" that have been popular in England for decades.

Butterfly zoos have opened since in Georgia and California. Others are planned in New York, Oregon and other states.

At least six books on butterfly gardening have been written in the past three years. Numerous how-to articles have appeared in newspapers and magazines.

People are signing up for butterfly outings and visiting butterfly zoos that are opening up around the country.

Enthusiasts participate in butterfly surveys and take butterfly identification courses. This year they founded the North American Butterfly Association, headquartered in New York.

During the week of July Fourth, more than 100 teams of butterfly fanciers will count and classify butterflies in communities from Oregon to Maryland. The annual event is sponsored by the Xerces Society, a non-profit organization based in Portland, Ore., and dedicated to preserving insects, shellfish and other animals that have external skeletons.

"Except for the butterfly, they're not the most appealing creatures," says Xerces director Melody Allen. "That's why we use the butterfly as our poster species."



The monarch, shown feeding in a butterfly garden at the Esalen Institute in Big Sur, Calif., is a common summer visitor to North America. While most butterflies stay in one place, the monarch is a legendary traveler. East Coast monarchs migrate 3,000 miles to El Rosario, Mexico, for the winter.



A yellow swallowtail feeds on the pollen of a red flower in a private butterfly garden in Sebastopol, Calif. Such gardens are on the increase as Americans find new fascination in butterflies. Some 700 species of the colorful insect are native to North America. All it takes to attract them are the right kinds of flowers and no chemicals. Buddleia is their favorite.

Dairy Cows In The Future

VINCE MAZZOLA
Everybody's Science

Dairy cows of the future will send out radio signals to alert a farmer when an animal is sick.

A tiny sensor in the cow takes temperature readings that will be transmitted every 15 minutes to a computer operating on the dairy farm. "We put together a 'health watch' system for dairy cows that can be built using off-the-shelf equipment," says Alan M. Lefcourt, a U.S. Department of Agriculture animal scientist.

"Changes in a cow's temperature patterns can signal the onset of diseases," he says. "Our electronic system is so sensitive it can sense a problem in the absence of a detectable temperature rise or other clinical symptoms."

Lefcourt says the system has monitored 12 cows daily for two years and has been successful in catching the slightest blip in temperatures. He is talking to feedlot operators and dairy farmers about

doing field tests on full-size herds to verify his studies at Beltsville, Md.

An early alert of sick cows "would reduce the farmer's cost of treatment and increase the cure rate," says Lefcourt, a biomedical engineer for USDA's Agricultural Research Service. He says the system's cost could be repaid in savings on medical bills and returns on milk production.

A dairy farmer also could install an alarm that would automatically warn the farmer of an abrupt, relatively high rise in a cow's temperature. This could mean an attack of life-threatening acute mastitis that needs to be treated immediately," he explains.

Lefcourt originally designed the computer-based system to detect mastitis, an infection of a cow's udder. Mastitis costs U.S. dairy farmers \$2 billion annually for treatment and lost milk production.

A cow's temperature also can be

monitored to detect when a cow is in heat, or estrous, and is ready to be bred. "Currently, dairy farmers miss detecting estrous about half the time," he says. "This mistake costs farmers over \$200 million annually." (Agricultural Research Service, U.S. Department of Agriculture)

