



In May 2016, Milkweeds for Monarchs launched the GRO100-funded St. Louis Riverfront Butterfly Byway. The community planted a 150-square-foot garden at Bellerive Park, the southern terminus for pollinators along the Mississippi River.

EVER GREEN

The Butterfly Effect

MAYORS MAKE LOTS OF PROMISES. Some they keep; many they do not. On Earth Day in 2014, former St. Louis Mayor Francis Slay made an interesting one: He promised the city would plant 50 butterfly gardens with its new Milkweeds for Monarchs campaign, and challenged the community to plant another 200 throughout the city. They achieved that goal and then some. Today there are more than 380 butterfly gardens in place across St. Louis.

Catherine Werner, the sustainability director for St. Louis, is the force behind the program, which is just one part of the city's broader Urban Vitality & Ecology Initiative (stlouis-mo.gov/uve), an effort to better connect people with urban nature—which is also an objective of the *City of St. Louis Sustainability Plan* (tinyurl.com/y7m2n2rs).

Werner was motivated to create the Milkweeds for Monarchs campaign by an interest in these critters, as well as her belief in the power of connections to nature. “Nature needs us,” she says, and “we need nature also.”

As part of the plan, St. Louis has been working to double the level of eco-literacy—understanding of environment, place, and sustainability—its residents revealed via survey in 2014. At the end of 2018, the city will recirculate that survey, which includes questions tied directly to monarch butterflies, to gauge how knowledge, perception, and values relating to urban nature have changed.

Along with helping the city move toward its eco-literacy goal, the campaign



The U.S. Fish & Wildlife Service began researching whether monarch butterflies should be protected by the Endangered Species Act in 2014. Watch a recent webinar on their status at tinyurl.com/ycqen3zf.

can add up to something significant from a conservation standpoint.

The population of the iconic monarch butterfly has declined more than 90 percent over the last 20 years. Monarchs—the only butterfly species known to migrate—are reliant on places like St. Louis during their annual 3,000-mile journey between Canada, the U.S., and Mexico. They need places to rest and milkweed plants for females to lay their

eggs on. Werner cites studies by Doug Tallamy, professor of entomology at the University of Delaware, who concludes that small planted spaces can be an important part of butterfly habitats.

Getting the community involved

Werner spoke in June at Smithsonian Institution's Natural History Museum about getting the program off the ground. She says then-mayor Slay gave his resounding support immediately. He even planted a garden at home, where he took a video of a monarch emerging from a chrysalis.

Bringing Slay on board was an important first step for Milkweeds for Monarchs, but exceeding that goal of 250 gardens required some significant—and creative—community outreach.

To inspire citizens, the city planted butterfly gardens in parks and other, less obvious places like firehouses, police stations, and schools—where an additional effort to plant 50 more gardens was launched in 2015. Dramatic butterfly art, like the larger-than-life monarch sitting above Brightside Park's gateway entrance, adds visibility and prominence to the city's growing love affair with butterflies. The city also installed educational panels, such as the ones I saw at Brightside Park.

The city is also moving ahead with even more significant plantings, including a new St. Louis Riverfront Butterfly Byway along the Mississippi River. And with some 20,000 vacant parcels in the city, more sites are likely.

For would-be butterfly gardeners, the city provides a lot of easy-to-access resources. There's a web page, an online site for registering your own garden, an online map to see where other gardens are, and special efforts aimed at schools—including organized workshops and an online educators' guide (tinyurl.com/pwrsyrd).

"We wanted to make it easy, to take out the guessing. What plants should I put in my garden? Where can I find the plants? How do I take care of them?" says Werner.

One especially interesting idea was the design and sale of a ready-made butterfly

'Nature needs us . . . We need nature also.'

—CATHERINE WERNER, SUSTAINABILITY DIRECTOR, ST. LOUIS



St. Louis works to improve students' eco-literacy via educational—and fun—art projects.

kit—what Werner called a “Monarch Garden in a Box.” For one price, residents could find everything they needed, including the right plants, to install a garden. This idea was very popular, and part of the goal of making it easy and convenient to participate. The city also gives away free seed packets—and monarch butterfly origami templates, for year-round gardens (tinyurl.com/y7bcvrxn).

Butterfly gardens taking off

Werner's work in making St. Louis a city that loves butterflies reminds me of another city where butterflies figure prominently: Singapore. Few cities have worked harder to actively grow and cultivate nature in a dense urban setting. Werner visited Singapore in 2013, and one of the experiences that most struck her was the two-story butterfly house she discovered inside the airport. It was a remarkable and unexpected discovery of nature there, and evidence of a commitment to keeping it in reach at times and in places where we are likely to be very stressed.

Several years ago, I toured the KTPH hospital in Singapore and had a similar

experience. There is a running tally of butterfly species visiting the site displayed on the side of one wall. The number of butterflies seen by patients, staff, and the larger community was understood as an important design goal of the facility.

For Catherine Werner, the program's success can be seen in the many ways that children and adults are now connected to and paying attention to the butterflies that pass through their city. Back at the Smithsonian, when she arrived at a slide of three young girls holding butterflies, she asked the audience what they all have in common: “Smiles, smiles, smiles.”

She described this as a “global, universal effect.” Butterflies make us happy, give us hope, break down barriers. And they immediately connect us to other things in the natural world.

“It's a transformation,” she said, “not just of the community, or your yard, your home, but of the people who engage with these monarch butterflies.” ■

—Timothy Beatley

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