Urban environments and the people that live in them are important for protecting species in trouble.

I had never seen a butterfly with a sticker on it. She flew between flowers just outside the CRWC office. I stared at her bright orange wings, outlined in black lace with white dots. The sticker was labeled “ABSS 424” and placed under her wing. I thought about the places she could have traveled and who the explorer was that placed the tag on the wing of a monarch butterfly.

It turned out she was from Rochester, about a mile away from our office. She was likely tagged by a resident trying to help a species in trouble.

“Sometimes monarchs are found by people who aren’t far from the release site,” said Angela Babbit – Communications Coordinator for Monarch Watch, a non-profit based at the University of Kansas and leading the tagging program since 1992.

Michigan is in the northern migration range of the eastern monarch, the largest of the two North American populations split by the Rocky Mountains. Both populations are falling. Overall, the eastern population has dropped over 80% and the western by 99% over the last twenty years. This is where urban communities can step up and make a difference.

HOPE

Nature has a place in cities. When about 80% of people in the U.S. live in urban areas, it has to. Studies are showing how big cities, like Chicago or Detroit, can provide spaces to protect wildlife.

It starts with thinking about Michigan native plants, says Marilyn Trent – founder of Rochester Pollinators, a committee of Rochester City Beautiful Commission dedicated to pollinator conservation. “This is an ecologically solvable problem and it can be solved in our own backyards.”

The monarch butterfly almost made the Endangered Species list last year. A ruling was issued in December by the U.S. Fish and Wildlife Service saying that, “Listing the monarch butterfly as an endangered or threatened species is warranted but precluded by higher priority actions.”

This meant that the monarch would not receive protection but could be reconsidered every year until they get put on the list or no longer need protection.

Monarch caterpillar on milkweed. Photo Credit: Melissa Gray, CRWC

CHALLENGES

One of the monarch’s greatest challenges is the decline in native milkweed plants, which are the only food sources for monarch caterpillars. Climate change, urban development and overuse of pesticides are all contributing factors to the decline in populations.

A survey released earlier this year by the World Wildlife Fund-México revealed that overwintering monarchs covered only 210 hectares (5.2 acres) of habitat – about the size of 4 football fields.
“Scientists estimate that the minimum population size for eastern monarchs to be out of the danger zone of migratory collapse is around 225 million butterflies,” says Tierra Curry – Senior Scientist at the Center for Biological Diversity.

“This year’s count was only a third of the minimum size needed to avoid collapse.”

Planting milkweed, grasses and other flowering plants appropriate for Michigan’s climate can help provide all pollinators with basic lifecycle needs. Public parks are wonderful spaces to begin this journey but they cannot do it alone.

“It is up to the residents to fill the gaps,” says Trent, and local governments can also step in to promote more habitats that are friendlier to pollinators.

“Encourage your mayor to take the Monarch Pledge. This pledge includes a list of actions that cities can do to improve native habitats. Thirteen cities in Michigan have taken the pledge, which include several from within our watershed: Chesterfield, Ferndale, Madison Heights, Oak Park, Rochester, Rochester Hills, Shelby Township, and Warren.

“My goal is to help the everyday person know that they can do something,” Trent says. Be on the lookout for opportunities to get involved with programs like Monarch Watch, Rochester Pollinators, and other events hosted by your local watershed councils.

“Area (in hectares) covered by overwintering eastern monarch butterflies from 1994 to 2020. Populations have steadily decreased since 1994. This Chart was created by Tierra Curry, Center for Biological Diversity.”

“ACTIONS

“There needs to be literally billions of milkweed plants to support the monarch population,” says Curry. “Every milkweed stem that people plant, whether in urban parks or backyards, will help because it can directly host a monarch.”

So, where do you begin to help? Start small with a few clusters of milkweed plants around your house or on a balcony, and see who checks them out. Here is a list of some other wildflowers to try. Public participation is important for helping wildlife and their habitat, too. Hands-on experiences with nature have a way of opening eyes to a wonderful world that you may never have known was there.

So, where do you begin to help? Start small with a few clusters of milkweed plants around your house or on a balcony, and see who checks them out. Here is a list of some other wildflowers to try. Public participation is important for helping wildlife and their habitat, too. Hands-on experiences with nature have a way of opening eyes to a wonderful world that you may never have known was there.

List of local organizations helping to restore native habitat and protect pollinator species biodiversity:

Michigan Pollinator Initiative  
https://pollinators.msu.edu/

Rochester Pollinators  
http://rochestermi.org/pollinators

U.S. Fish and Wildlife Service  
https://www.fws.gov/savethemonarch/

Monarch Watch  
https://monarchwatch.org/tagging/

Center for Biological Diversity  
https://www.biologicaldiversity.org/species/invertebrates/monarch_butterfly/