



The Butterfly Effect

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Harnessing the spirit of residents, schools, organizations, places of worship, and businesses to create a greener community.



Contents

Unfarming the Driftless

Mike and Marcie O’Connor share their 20-year journey of “unfarming” 500 acres of former agricultural land and transforming it into high quality habitat for native wildlife. Page 3.

Complete Puffery

Nature photographer Travis Bonovsky explains bird puffery—without exaggerating. Page 13.

Jewel-Toned Beauty

Naturalist Dave Crawford discovers gems in his garden. Page 15.

My Slice of Heaven

A 5,000-square-foot urban residential lot provides big habitat in a small space. Page 17.

Listening to the Trees

“Have you ever stood among the trees—those tall, stoic, magnificent plants—listening to their leaves rustle in the wind and imagined quietly to yourself that they’re communicating in some way?” Page 25.

Notice Nature Everywhere

The harmless (to you!) yellow garden spider. Page 27.

About This Journal

What is a “butterfly effect?” Page 29.

Cover: The face of this late-summer painted lady butterfly reminded photographer Vicki Bonk of a whimsical character from a Dr. Seuss book. **Left:** Nature at home. Monarchs on meadow blazing star (*Liatris ligulistylis*) sipping nectar in photographer Vicki Bonk’s front yard garden.

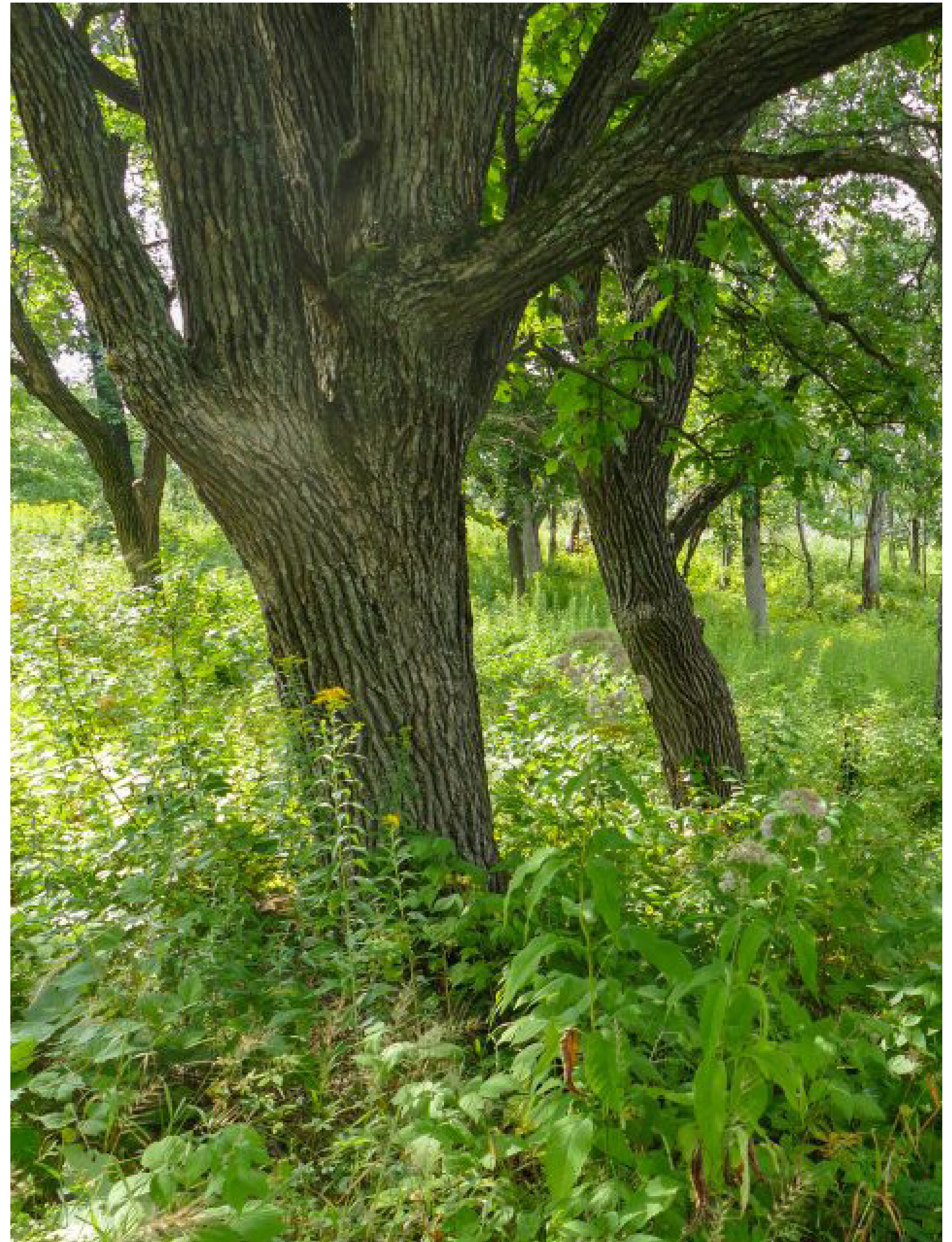


Unfarming the Driftless

When the O’Connors bought an old dairy turned deer-hunting farm, they had visions of transforming it into a “perfect” prairie. “We envisioned prairies with beautiful flowers, all natives, and no weeds,” explains Marcie, who, with her husband Mike, has been restoring their 500-acre farm near Alma, Wisconsin, into prairie and savanna for the past 20 years. “We gradually realized that we’ll never have perfect prairies. We’ll always have weeds and invaders.” Despite the persistent challenge of beating back non-native vegetation, the O’Connors have transformed their property into a remarkable re-creation of what their landscape may have resembled before early settlers turned much of the Midwest [Driftless Area](#) into dairy farms and fields of crops.

The Driftless Area—a region of western Wisconsin, southeastern Minnesota, northeastern Iowa, and a small pocket of northwestern Illinois that was bypassed by glaciers—is noted for its undulating landscapes and rugged terrain. Portions of the O’Connors’ acreage, comprised of steep hillsides and narrow valleys, had never been farmed. Those unplowed remnants of dry bluff prairies, savannas, sedge meadows, and wet prairies had long been overgrown, overgrazed, or inundated by invasive vegetation. But, buried in the soil on much of their land were prairie plants and long-dormant native seeds waiting for the right conditions to spring back to life. And, through the planting of new native vegetation, selective tree girdling, and the removal of invasive species, the acreage steadily transitioned into a robust refuge for wildlife. “As the restoration matures, we see more animals and plants every year,” remarks Marcie.

Previous spread: Prairie Haven’s largest prairie area. The [Western Prairie](#) is about 60 acres. Combined with [Buffalo Ridge](#), it makes 80 acres of contiguous planted prairie. **Right:** A remnant of what was originally savanna: widely scattered oak trees with prairie plants growing beneath. Before the couple started to work here, the brush was so thick they couldn’t see the oaks. In the fall of 2013, Marcie and Mike started cutting and mowing brush. This photo, taken in August 2016, shows the prairie and savanna plants returning.







The couple is pleased with the results of their hard work—even though they have spent more time than they could ever have imagined to bring their property back to life. Their years of hard work have been fueled by a determination to provide safe haven to native wildlife. “So much wild land is being lost every year from relentless human development. It’s really important to us to protect and restore what we can of these native landscapes. Otherwise, they’re all going to disappear,” explains Marcie.

The 500-acre native landscape the O’Connors are lovingly restoring truly lives up to the name the couple gave to their farm, “[Prairie Haven](#).” Through [Marcie’s blog](#) (with Mike’s tech support), frequent talks and presentations, farm tours, and an annual slide show, the couple view Prairie Haven as a living platform for education. “We hope our efforts will inspire others to appreciate the wildlife around them, plant native plants, protect native habitat, and perhaps try a restoration or native garden of their own,” says Marcie. “We’re deeply committed to sharing what we’re doing with other people.” It seems quite probable that from time to time Mike and Marcie must stand in awe of what they have created from former soy and cornfields—and an old dairy farm.

Previous spread, counterclockwise from top left: Summer 2000, planted in soybeans; the former soybean field, 11 years later; the couple’s home with a solar array, which annually produces more energy than consumed; a circa 1930 photo of the farm and [Sumac Bluff](#), then owned by the Rutschow family. **Left:** Marcie documents the birds, butterflies, moths, insects, spiders, fungi, lichen, snails, and more that she discovers at Prairie Haven. Pictured here: *Mycena acicula* – Coral Spring Mycena. Click here to peruse her “[farm inventory](#)” to date. **Next spread:** In addition to the planted prairies, numerous prairie and savanna remnants—relics of the habitats that were here before the land was farmed—are in the process of being restored and enlarged. Pictured: [Hidden Oaks Point](#), one of the dry bluff prairies.



Complete Puffery

Nature photographer Travis Bonovsky has a knack for spotting birds “doing their thing,” just about any time he walks out his front door. Although common in many parts of the country, the northern cardinal’s red plume never fails to thrill—especially in the dead of winter. Bonovsky explains why he took this particular picture: “Many birds that thrive in colder climates, such as the northern cardinal, use a technique of periodically ‘puffing up’ their feathers to stay warm. This practice creates more air spaces between their layers of feathers and thus traps more body heat.” The cardinal pictured here posed to illustrate a good example of the practice!





Jewel-Toned Beauty

“I love this composition, with the aster’s swept-back petals and the bee’s intense colors against the dark background. The combination of the jewel-toned greens and yellows of a sweat bee and a New England aster blossom is an irresistible delight. Both are gems. Small, but flashy.”

— *Dave Crawford, naturalist.*

A photograph of a house with a garden. The house has a grey roof and white walls with dark trim. A large tree stands behind the house. In the foreground, there is a lush garden with various plants and flowers, including purple and yellow blooms. A wooden fence is visible in the background. The text "My Slice of Heaven" is written in a purple serif font in the upper right corner.

My Slice of Heaven

“My little slice of heaven in the city provides big habitat for wildlife. A small, modest bungalow on a narrow, 40-foot wide lot in Minneapolis, not far from the only gorge along the mighty Mississippi. When my husband and I first moved to the neighborhood in 1979, our yard was mostly grass with a few shrubs, perennials, and bulbs planted along the foundation. We did what every other new homeowner would do: we bought a lawnmower, treated the lawn for dandelions, and maintained a neat and tidy manicured look. The social norm! If I didn’t keep the lawn mowed, my neighbor Ralph would jokingly suggest I get a goat!

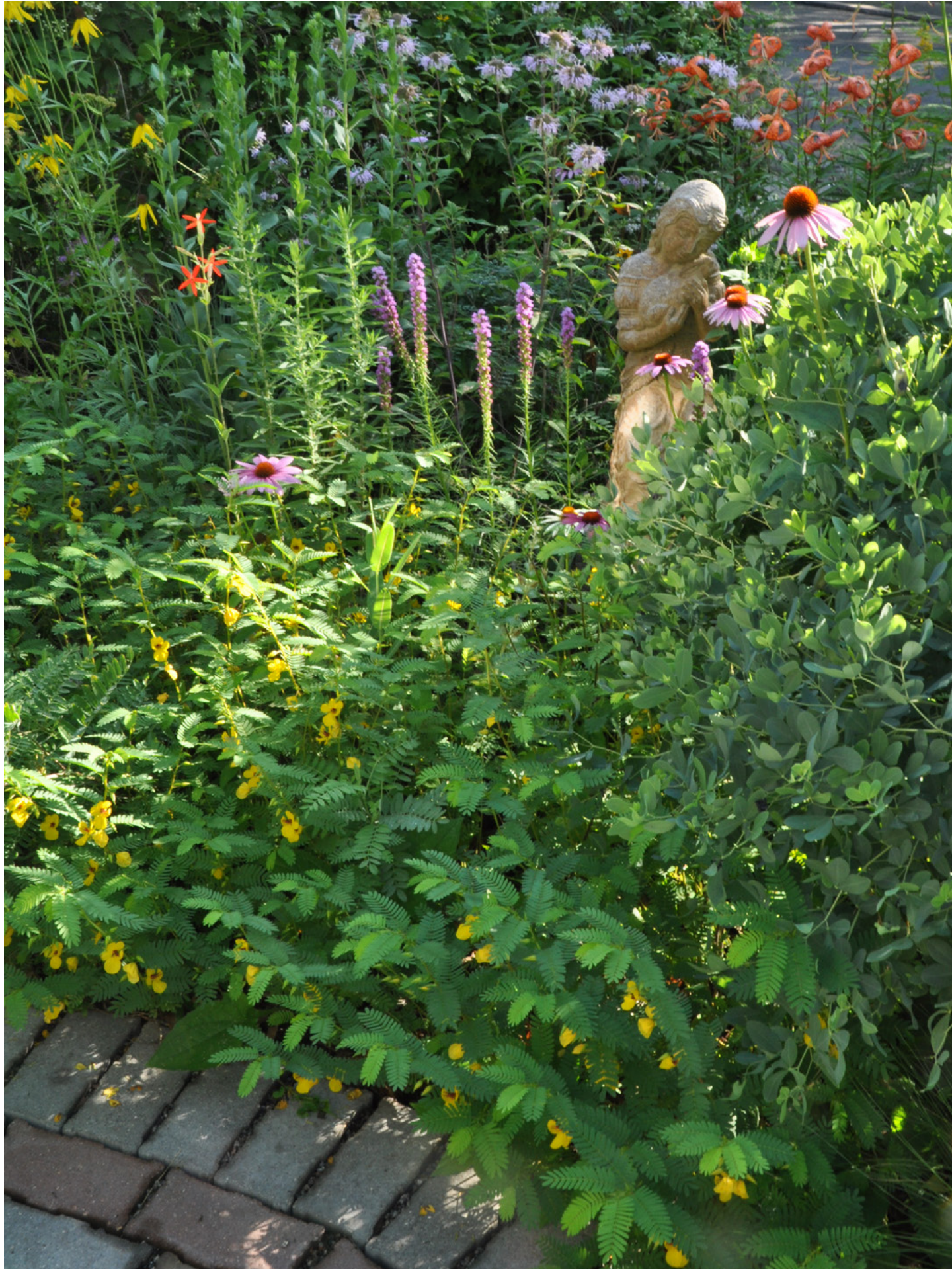
“About the same time we bought our house, a grassroots movement was starting to take hold. The water in our City of Lakes had become contaminated by stormwater runoff from yard and street chemicals. Our natural areas were being consumed by invasive species, and migratory birds were struggling to find food as they passed through the city each spring and fall. Various organizations started campaigns to change the way we manage our own, personal spaces. While our small city lot was a manageable size, mowing was not my favorite pastime. These blossoming organizations provided the gentle nudge I needed to reduce my lawn size and add more native plant gardens.

Previous spread: East facing front yard transitions from shade to a pocket of full sun where pollinators congregate in the late afternoon. **Right:** The front garden and yellow door of the bungalow-era home offer a cheerful welcome to visitors.





Left: The heart-shaped leaves of the eastern redbud set under the canopy of a silver maple in the backyard. **Above:** Dappled light in the woodland gardens showcase spring ephemerals such as the Celadine Poppy (*Stylophorum diphyllum*).



“Introducing native plants to my gardens started about 20 years ago. I missed being surrounded by the natural world of my childhood; but I also absolutely loved the cultural diversity of city life. Driven by nostalgia, each time I visited my mother I admired the native plants abundant in my hometown. And so my transition to natives began.

“Today, my small city lot is a [National Wildlife Federation \(NWF\) Certified Wildlife Habitat](#) and it feels much bigger than it actually is. While there are a few remnant plants from my original garden, most have been replaced with native plants. Now, there are no lawns to mow, no leaves to rake, and no pests to kill. Trees and shrubs offer shelter, privacy, and shade for both humans and wildlife. Native plants and ground covers provide nectar, pollen, and foraging for birds and insects. The woodland backyard is an intimate and cozy retreat. And my boulevard and front yard gardens are welcoming to the children and adults who walk by and stop to get a taste of nature. What was once lawn is now teeming with life, supported by over 160 species of native plants in both managed gardens and naturalized areas.

“A funny thing happens when you embrace nature: it begins to embrace you. The land you inhabit with nature comes to life and speaks to you, taking you on an adventurous journey in your own back-yard. You begin to appreciate all the life forms you had forgotten about, from fireflies to bumblebees, finches to Cooper’s hawks, chipmunks and yes, even a fox. As my neighbors see the bumblebees and other wildlife in my yard, they are excited to expand their own habitat gardens. The unexpected joy of living with the land—and its creatures—brings you back full circle to the homage of the woods where you danced as a child.

“I am living wild in the city and wouldn’t have it any other way.”

— *As told to Neighborhood Greening by Julia Vanatta, co-president of the [Wild Ones](#) Twin Cities chapter.*

Left: This sunny garden graces the edge of a permeable paver path which also solved winter ice buildup issues from a nearby downspout.

Listening to the Trees

“Have you ever stood among the trees—those tall, stoic, magnificent plants—listening to their leaves rustle in the wind and imagined quietly to yourself that they’re communicating in some way? Perhaps in whispers, or hushed voices?

“It turns out that your imagination isn’t as wild as you might believe. Trees do, in fact, talk.

“Trees are the foundation of a forest, but a forest is much more than what you see. Underground, there is this ‘other’ world of infinite biological pathways that connects trees and allows them to communicate.”

— From forest ecologist [Suzanne Simard’s TED Talk](#). Simard is a Professor of Forest Ecology at the University of British Columbia, Canada. Simard’s decades-long research has revealed that deep below our feet lies a sophisticated network of roots in which trees communicate by sending chemical messages to one another. Click [here](#) to learn more.





Notice Nature Everywhere

The Yellow Garden Spider

This harmless, stunning creature should be welcomed in your yard or garden. As a beneficial insect predator, the yellow garden spider will help keep flies, moths, beetles, wasps, and mosquitoes in check in your yard. This spider is most often observed in the month of September when it has grown to a noticeable size and has created a web that showcases its trademark zig-zag zipper weave. Welcome this [spider](#) home by planting tall grasses in sunny, yet sheltered, areas of your yard.

**“When we know ourselves to be connected to all others,
acting compassionately is simply the natural thing to do.”**

— Rachel Naomi Remen, M.D.; author, *Kitchen Table Wisdom*.

About This Journal

In mathematical chaos theory, the butterfly effect is the concept that a *very small difference in the initial state of a physical system can make a significant difference to that state at some later time*. What can this theory offer to the communities in which we live? We think it offers a lot. The cumulative effort of individual actions can positively impact the local ecosystems that comprise our lakes, streams, wetlands, yards, gardens, recreational areas, open spaces, roadsides, schools, and places of worship, and much more.

Neighborhood Greening, a non-profit organization dedicated to environmental education and stewardship, publishes *The Butterfly Effect* twice per year. In the journal, we celebrate community successes, examine small but impactful changes we can make to become better stewards of our local ecosystems, and tell the stories of those who are striving to green their neighborhoods. By harnessing the spirit of community, we believe focused efforts will make our neighborhoods better places to live for both humans and wildlife. There is much we can do to positively impact our shared environment—together. House by house. Block by block. Neighborhood by neighborhood.

We hope you enjoyed *The Butterfly Effect* and that you look forward to receiving this free publication in your inbox twice per year. You can sign up by visiting www.neighborhoodgreening.org. Be sure to [connect](#) with Neighborhood Greening on Facebook to keep learning how to help green your neighborhood throughout the year.

Do you have a story or idea to share about how you or someone you know is making your neighborhood greener, more environmentally sustainable, or wildlife friendly? Please send your ideas to Green@neighborhoodgreening.org. Want ideas to green your neighborhood year round? Be sure to check out “[42 Ways to Green Your Neighborhood](#)” on Neighborhood Greening’s website.

Thank you to this issue’s contributors: Carole Arwidson, Vicki Bonk, Travis Bonovsky, Dave Crawford, Mike and Marcie O’Connor, Nel Pilgrim-Rukavina, and Julia Vanatta.

“For us there is only the trying.
The rest is not our business.”

– T.S. Eliot

