

Native plants can be more appealing to butterflies.

Native plant GARDENING

IT'S FOR THE BIRDS (AND BEES AND BUTTERFLIES).

Story and photos by Paul Skawinski

For centuries, people have been moving plants out of their native ranges, and planting them where many of their predators and natural control mechanisms are absent. You may have heard of a few of them: Japanese barberry, European buckthorn, Japanese knotweed, oriental bittersweet or Eurasian watermilfoil.

These plants often thrive in their new, far-away homes, since they have been relieved of most of the stressors that limit their success in their native range — herbivores, viruses, fungi and more. Unfortunately, they often thrive a little too much. In fact, many of our worst invasive plant species arrived here by intentional importation from other countries. The U.S. Fish and Wildlife Service estimates that invasive species cost the United States over \$120 billion annually.

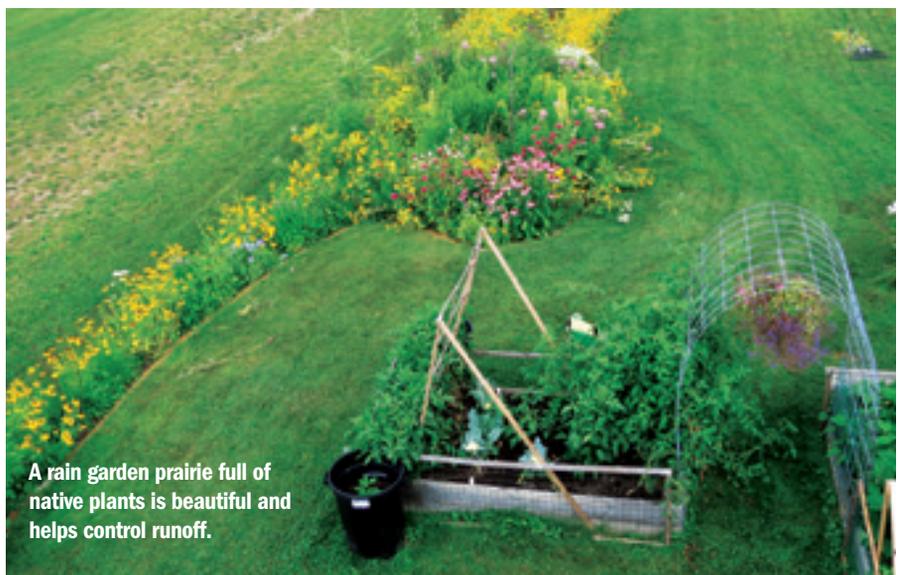
So this begs a question — why not use plants that naturally belong in our region?

Why are nonnative plants so popular in the urban landscape?

Since nonnative plants are unfamiliar to our native insect communities, many of

our native insects aren't able to feed on them. Through thousands or millions of years of co-evolution, plants and insects in an area develop strong relationships. Plants produce compounds that are toxic or unpalatable to herbivores, and those same herbivores develop ways to detoxify those compounds or develop a taste for them.

When a plant species suddenly arrives in an area well outside of its native range, the insect community is often un-



A rain garden prairie full of native plants is beautiful and helps control runoff.

able to utilize that species. This is often visible in the lack of any insect damage on the plant. A landowner may think it's great that their new plants have a high degree of success and look picture-perfect all the time, but what it really means is that the plant is ecologically useless in terms of supporting insect life — the primary food source for birds, bats and other creatures.

To preserve frogs, birds, turtles and mammals (humans included), we need a balanced ecosystem in which all inhabitants have specific roles and are dependent on one another.

Many gardeners hold a misbelief that native plants are boring — that they can't provide the aesthetic qualities that a gardener is looking for. This is simply untrue. Hundreds of Wisconsin native plants are well-suited to urban landscapes, and can provide a variety of colors, heights, textures, foliage patterns and bloom times. Showstoppers like the brilliant red cardinal flower or prairie blazing star demand attention from any passerby. At the same time, they provide food to a wide variety of insects and hummingbirds during the growing season, and to many seed-eating birds during the winter. Small gardens or containers will benefit from the delicate nodding onion, while larger areas are well-suited to the gigantic cup plant or its close relatives like the compass plant.

Benefits of native plants

Native plants are much more appealing to butterflies than nonnatives. Although nonnative plants can still produce nectar that adult butterflies will feed on, they don't provide sustenance for the next generation of butterflies.

Each butterfly species has a preference for the type of plant it will lay eggs on. Some butterflies are pretty easy-going in this regard; they may be willing to lay eggs on any plants within an entire plant family, like the beautiful black swallowtail, which seeks out members of the carrot family.

Others though, are much more specific. Monarchs are well-known for their close relationship with milkweeds, primarily the common milkweed. No other plants can support monarch caterpillars. Other examples include the Karner blue butterfly and its specific host, wild lupine; the viceroy and willows; the Baltimore checkerspot and turtlehead; or the many fritillaries and their host plants, the violets. In order to promote healthy populations of butterflies, the popula-



A prairie in bloom. The author credits his successful planting to using plugs from nearby native plant nurseries.



The author's son, 2 years old at the time of this photo, finds toads and time in the backyard more appealing than television.



Silphium perfoliatum, a member of the aster family, and also known as the cup plant.

tions of their host plants must also be preserved.

One backyard at a time

Several years ago, my wife and I agreed that we spent too much time mowing our lawn. There were areas that our family regularly used, and there were other areas of lawn that we hardly ever used. Furthermore, we had no shade, no privacy from the neighbors, and very few birds, butterflies or other animals visiting our yard. We were spending a lot of time and effort maintaining a landscape that wasn't giving anything back. It was time for a change.

Our first change was to install a 300-square-foot butterfly garden with several trees along the west side. The site was prepared by simply digging out the lawn turf (the roots only go down a couple of inches), and then adding several dozen species of plants native to Wisconsin wetlands and prairies. We chose to plant 2-inch plugs rather than start from seed, knowing that the plugs would establish much faster, and would be more effective at competing with the inevitable bank of weed seeds that would push less desirable species into our planting. Since our basement had some moisture issues, we also decided to route a couple of downspouts underground to the butterfly garden. This would remove some of the moisture from around the house, and water our new plants during each rainstorm. Two for one!

After about six weeks, the wild bergamot and black-eyed Susan were in bloom. We were delighted to see the bees and butterflies visiting the black-eyed Susan, and even more delighted to watch the beautiful hummingbirds and sphinx moths visiting the bergamot. We were hooked!

The following spring, we increased the size of the butterfly garden to nearly 1,000 square feet. Again, we decided to use plugs from nearby native plant nurseries instead of seeds, because of the higher success rate, faster establishment, and lower maintenance requirement. The neighbors quickly noticed the dramatic change in our backyard, and asked many questions about the project, showing a little skepticism, but

mostly just curiosity.

That summer was full of butterflies, bumblebees, toads, wood frogs and countless other creatures. Our son (2 years old at the time) couldn't get enough; television and toys were dismissed in favor of spending more time in the backyard. We even started to photograph each new butterfly species we saw, so that we could identify it and keep a running list.

As the growing season came to a close, we had a list of 11 butterfly species that had visited our yard that year. The asters and goldenrods were painting a rainbow of purples, blues, yellows and whites across our little piece of the Earth, and the monarchs hopped from flower to flower, sipping the nectar that would power their journey to Mexico. As our fluttering friends sensed the impending cold and we wished them farewell, my wife and I came to another agreement: we were definitely making this garden bigger again next year! 

Paul Skawinski lives in central Wisconsin on a one-third acre, urban lot with his wife and two children. At the time of this article's writing, their three native plant gardens cover over 2,800 square feet and include over 200 species of plants native to Wisconsin.

>>> TIPS FOR SUCCESS

- Plant densely to discourage weeds.
- Choose a diversity of heights, colors and bloom times.
- Limit grasses if your main goal is attracting/nourishing pollinators.
- Put the right plants in the right place. Some plants require specific conditions; others are versatile.
- Use plugs if you can afford it. Native plugs for a 100-square-foot garden would cost \$50-\$150. Seeds would cost less than \$20.

It takes several years for some perennials to fully establish from seed, so maintenance is high during that time. Plugs will often bloom the same season and will require less nurturing and weeding.

>>> WHERE CAN I FIND HELP?

Many native plant nurseries are located across the state and they are ready to help you choose the right plants for your site. Contact your local UW-Extension agent or local chapter of Wild Ones (www.wildones.org) if you need help finding a nearby native plant nursery.