

10 ecological landscaping principles: Tips from BWSR's senior ecologist and vegetation specialist

First-time native habitat gardeners sometimes worry about doing things just right, or about throwing the ecological balance out of whack. Beginning an ecological garden — a garden that rebuilds biodiversity and environmental health — can feel daunting.

As an ecologist, I'm here to tell you that your ecological garden doesn't have to be perfect. The best way to begin is to start small and expand. Our natural systems are already out of balance. The sooner you start creating habitat, the sooner you can support declining populations of pollinators and make your yard resilient to climate change. The following 10 principles can help you achieve your vision of installing an ecological landscape:

Have your utilities marked: Before starting any project where you will be digging, it is essential to call Gopher State One Call, 651-454-0002. Marking the location of utilities such as electrical and gas lines ensures you can dig safely. It's also important to consider the location of cable lines, outdoor lighting and other homeowner-installed lines.

Start small: It's OK to start small! Even if you add a few native plants to your landscape, you will help pollinators and other wildlife. You can always add more plants each season. Native plant nurseries can help you select plants and plan small native pocket plantings to get started. Some nurseries offer starter kits.

During a hot, dry summer even tough native plants can benefit from supplemental watering to ensure that they provide high amounts of pollen and nectar for pollinators. Most plants need about an inch of water a week either through rainfall or watering.



BWSR Senior Ecologist and Vegetation Specialist Dan Shaw and his daughter Lily planted sedges in their ecological garden. **Photo Credit:** Dan Shaw

ABOUT THE AUTHOR: Dan Shaw started working in the ecology field about 30 years ago. Before joining BWSR, he worked with restoration companies, native plant nurseries, consulting firms and nonprofits. Over the past 19 years at BWSR, he's coordinated conservation programs focusing on native vegetation establishment, invasive species management, pollinator habitat, habitat-friendly solar and climate resiliency. Shaw has taught ecological design and restoration classes at the University of Minnesota for the past 25 years, and has written and illustrated several ecology-focused publications.

Identify unused areas of your yard: You don't necessarily need a detailed planting plan to get started. It's OK to have small projects in different areas of your yard. A helpful first step is to define unused areas, such as slopes, corners or moist drainageways — those can be great places to establish habitat. If you have concerns about bee stings, establishing habitat in low-

traffic areas is a good option.

Use lines in your designs: The human eye is attracted to straight lines, including landscape features such as walls, fences, edging and sidewalks — elements that can help create a sense of order. At times, ecological gardens can look somewhat messy. Lines can enhance and organize their beauty.

Keep it fun: Planning a pollinator project is an opportunity to involve the whole family in creating a refuge for wildlife. You can be a designer, craftsperson, gardener and steward of the land simultaneously. Tinkering in the garden — whether that means expanding existing plantings, separating plants in the spring or pruning shrubs — is always rewarding, and a great way to stay active.

Collaborate: One of the most rewarding aspects of ecological gardening is the collaboration among those passionate about flowers, pollinators, birds and spending time outdoors. If you're starting your first ecological gardening project, it's helpful to make connections with neighbors who garden. University of Minnesota Extension Master Gardeners, Master Water Stewards and Minnesota Master Naturalist volunteers are other experts who can offer advice. We are fortunate in Minnesota to have so many great mentors.

Make habitat connections: Identifying areas where you can expand existing plantings is another consideration in site selection. I like to round off corners in my yard to make it easier to mow. If you can connect areas of habitat on your property, you will create benefits for a wider range of species.



This pollinator meadow in Aurora was established by a gardener who received support from BWSR's Lawns to Legumes program, which offers coaching, funding and resources to help Minnesota residents establish new pollinator habitat. Contributed Photo

Connecting nesting areas with food sources can aid pollinators moving through the landscape.

Summer can be a good time to add containerized pollinator plants to gardens, but watch the forecast for periods of cooler temperatures and higher rainfall to give plants the best opportunity to thrive.

Watch the wonder: Because they change throughout the year, plantings attract a diverse array of bees, butterflies, beetles, dragonflies, birds and other species. Try

placing at least some of your habitat next to decks, windows or other areas where you can observe the wildlife diversity you've helped restore.

Keep learning: I've worked in the ecology field for more than 20 years, and I still learn something new about nature every day. Our natural world is amazingly complex. As you start your project, check out the wide range of resources developed by conservation partnerships on the [Lawns to Legumes webpage](#).

Experiment and make

mistakes: Finally, remember that it's OK to make mistakes. They're often more memorable — and sometimes more entertaining — than our successes. Making mistakes is how we learn to create better plantings. The beauty of an ecological landscape is that it will evolve over time. Making small adjustments to plantings over time is a great way to get outdoors and bring biodiversity to your landscape.

BWSR staff members write and produce Snapshots, a monthly newsletter highlighting the work of the agency and its partners.