

Smart Gardening: Smart lawn alternatives to protect pollinators

Rebecca Krans, Michigan State University Extension

Adapted from Abiya (Abi) Saeed and Rebecca Krans, Michigan State University Extension

Pollinators, especially bees, provide us with valuable services by pollinating plants that contribute to food production and beautify our landscape. Disturbingly, there is increasing evidence that many important pollinator species are in decline. As people develop more and more land, the amount of habitat where bees and other pollinators can nest and find flower resources (food) is shrinking. This is especially true in urban and suburban areas where farmland or natural habitats have been replaced by subdivisions and parking lots. Lawns that are aesthetically pleasing to most people create a dense, green carpet with almost nothing to offer pollinators and other beneficial organisms.

Smart gardeners can make a difference by taking steps to be thoughtful about how they maintain their lawn. Look to reduce and minimize the impact of gardening practices on bees. Lawns with a few weeds can provide food and habitat for hundreds of bee species. Your lawn can act as critical stepping stones for these beneficial insects by bridging gaps between remnants of natural habitat.

Lawn alternatives to encourage pollinators

The types of alternative lawns are only limited by your imagination. For a more grass-like lawn that requires fewer inputs, you can choose plants such as *Liriope* to replace a traditional lawn on either flat or steep areas. This hardy perennial can be mowed several times a year for a more lawn-like appearance or left alone. Other grassy perennials



Jason Gibbs, MSU Entomology

Anthidiellum notatum, the northern rotund-resin bee, on clover.

such as sedges and fescues can replace lawn in wet or dry areas that are difficult to maintain.

If you want to reduce turf areas, consider using groundcovers including creeping thyme, a low-growing plant that produces lots of flowers and requires minimal maintenance. Other groundcovers include *Ajuga*, bearberry or *Pachysandra*. Low-growing clover like white or Dutch micro-clover, is a thrifty lawn alternative which provides nectar and pollen for bees.

For a more natural look, turn your lawn into a low maintenance prairie filled with native plants of varying heights and textures. For example,



The importance of pollinators

Many of our fruit, vegetable and fiber crops require pollination by insects. These pollinators also pollinate more than 85% of the world's flowering plants and are ultimately responsible for the seeds and fruits that humans, songbirds and even black bears consume. Since learning that the number of pollinators is significantly declining, many gardeners are learning how to make positive contributions towards their conservation. Understanding habitat needs and food sources while adjusting our garden maintenance routine is a step forward in pollinator conservation.

Many of us quickly think of the honey bee as a pollinator, but over 450 species of native bees live in Michigan. Native bees come in many shapes and sizes, and are often adapted to prefer native trees, shrubs and herbaceous plants, but will also work a widely diverse garden plant palette. Although bees are the most important pollinators, there are several other groups of insects, birds, mammals and even reptiles that play their part in pollinating specific plants.

Beneficial insects also make up the world's hardest-working workforce by keeping pest insects in check. A diverse selection of native and non-native plants, judicious reduction of pesticide use and observant gardeners can form a successful strategy for preserving bees and other "good bugs" in our landscapes and gardens.



Helenium (sneeze weed), Globe thistle and *Asclepias* (milkweed) will create a diverse, colorful and eye-catching landscape all year round. You can gradually reduce the amount of turfgrass area within your current lawn and replace it with native flowerbeds or expand your ornamental plantings.

Weeds can add flowers for bees

Although dandelions are considered unsightly by some, they are a great resource for hungry pollinators. By leaving a few of these flowering plants, you will encourage visiting pollinators throughout the growing season. Research shows lawn weeds like clover and dandelion are one of the largest and most important food resources for bees in urban areas. Consider incorporating short flowering plants such as clover, micro-clover, trefoil, self-heal/heal all (*Prunella*), creeping thyme and small bulbs such as crocus.

Not all pollinators sting

Pollinators investigating flowering plants in your lawn are not likely to sting you. They are only interested in the food and habitat in your lawn and garden, and not interested in bothering you. As you look to make your yard more friendly for pollinators, remember to reduce the amount of chemicals you use in your gardens, never spray any flowering plants in bloom or bare soil, and always read and follow label directions. Reimagine (bee-imagine) your idea of a perfect lawn. Does it need to be a picture-perfect turf landscape, or a perfect paradise for you and pollinators?

A field guide, “Bees of the Great Lakes region and wildflowers to support them,” is for sale at shop.msu.edu if you want to learn more.

Additional Smart Gardening tip sheets on gardening for pollinators from MSU Extension

- Know the insects that look like bees (bit.ly/SG-Wannabees)
- Smart gardening to support monarchs (bit.ly/SG-monarchs)
- Smart lawn care to protect pollinators (bit.ly/SG-beeslawns)
- Gardening for pollinators: Smart plants to support pollinators (bit.ly/SG-pollinplants)
- Invite pollinators by creating a smart habitat (bit.ly/SG-beehabitat)
- Pollination in vegetable gardens and backyard fruit (<http://bit.ly/SG-pollinating>)

Published January 2017. Updated January 2020. This publication is supported in part by the Crop Protection and Pest Management Program 2017-70006-27175 from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jeffrey W. Dwyer, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned.



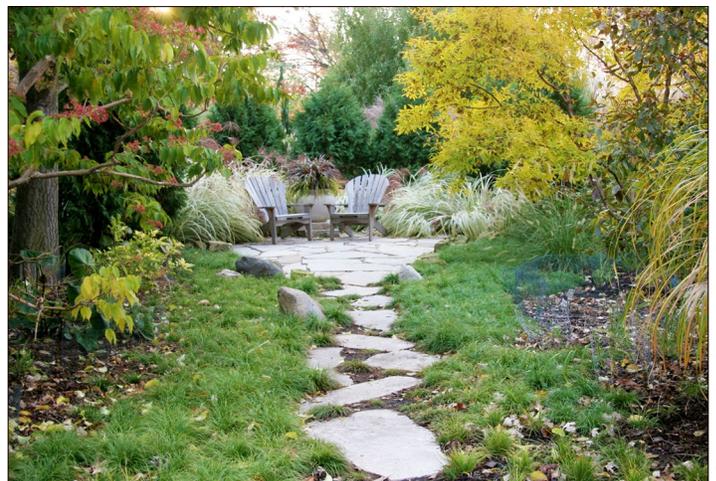
Liriope covers a sloping area.

Rebecca Finerman, MSU Extension



Ajuga forms a welcoming groundcover for pollinators.

EnLorax, Wikimedia Commons



Sedge (*Carex pensylvanica*) forms a grasslike border along a slate walkway.

Jeff Epping, Olbrich Botanical Gardens

For more information on a wide variety of Smart Gardening topics, visit www.migarden.msu.edu or call MSU's Lawn and Garden hotline at 1-888-678-3464.