

Wisconsin Pollinator Habitat Guide

No site is too small to provide habitat that will improve the abundance and health of your local insect pollinator community. Explore the health of your pollinator habitat with our online assessment at www.pollinators.wisc.edu/habitat.

What does a healthy pollinator habitat look like?

Insects pollinators thrive when they have...

Blooming flowers to feed on throughout the growing season,



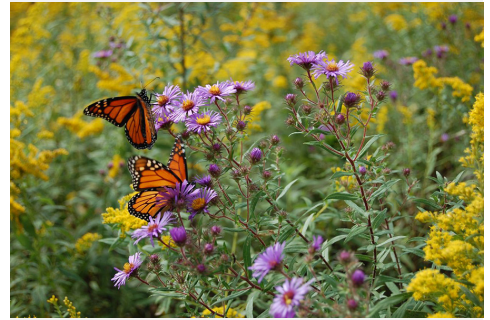
A foraging bumble bee.

a safe place to nest,



Ground nesting mining bee

and a habitat free from toxic chemicals such as insecticides.



Monarch butterflies foraging in a prairie, by Ellen MacDonald.

Food habitat (blooming flowers)

Pollinators forage for pollen and nectar on blooming flowers throughout Wisconsin's growing season from April to October. A healthy pollinator habitat provides insects with a mix of native flowering plant species that bloom at different times throughout the growing season.

- Plan your site to ensure flowering plants cover the majority of your designated habitat area.
- Plant *at least* 4 plant species that bloom in Spring (April - May).
- Plant *at least* 4 plant species that bloom in Summer (June - August).
- Plant *at least* 4 plant species that bloom in Fall (September - October).
- Plant the habitat area with *at least* 50% native flowering plant species.
- Remove or limit the number of managed honey bee hives (*a bonus for native pollinators*).

Choosing native plant species

Our native pollinators have co-evolved with native plants, and the plants are well-adapted to thrive in Wisconsin's soils and climate. Native plants provide the best food resources for native pollinators throughout the stages of their life.

Non-native plants, while they can be attractive, are sometimes inedible to caterpillars, and the pollen and nectar of non-native flowers can be less nutritious, or even inaccessible to pollinators.

Pollinator Resources Center - Great Lakes (Xerces)
www.xerces.org/pollinator-resources-center/great-lakes

Seek (a smartphone app by iNaturalist)
www.inaturalist.org/pages/seek_app

Native Plant Trust - Go Botany
www.gobotany.nativeplanttrust.org

A few more tips

- Encourage 2 to 3 low-growing flowering plant species in your lawn, so it doesn't become a habitat desert.
- Allow your herb garden plants to go to seed to feed the pollinators.
- Plant milkweed - monarch butterflies require this group of native plant species to reproduce.

Bee Lawns: Turf Grass with Flowering Plants (UofM)

www.beelab.umn.edu/files/bee-lawns-2018-mg.pdf

Supporting Native Bees: Our Essential Pollinators (UW-Madison)

www.go.wisc.edu/s1q37c

Planting for Pollinators: Guiding Principles and Design Concepts For Residential Pollinator Habitat (Minnesota BWSR and Xerces Society)

www.bit.ly/2yD4mlD



Photo by USFWS Midwest

Nesting habitat

Pollinators require undisturbed bare ground, leaf litter and standing dead twigs/stems to build their nests and overwinter. Perennial wildflowers and grasses left standing over the winter will provide shelter and safe nesting habitat for insects.

Places like these, where nests may be present, should not be tilled, trimmed or cleaned up until at least late spring, after pollinators have emerged as adults from their overwintering nests. Ideal pollinator habitat includes old growth areas that are left uncleaned and undisturbed year-round, providing insects with continuous nesting habitat.

- Leave patches of dead wood and dead stems *at least* until late May for cavity-nesting bees.
- Leave patches of undisturbed ground, leaf litter and brush year-round for ground-nesting bees.
- Remove plastic mulch barriers and avoid using heavy or treated mulch.

Insecticide use

Exposure to insecticides has a direct impact on pollinator health. Pollinators can interact with insecticides directly when they are sprayed on plants that the insects feed on, and when systemic insecticides are present in the soil where they nest. Pollinators can also be indirectly exposed when plants take up these insecticides through their roots and the chemicals move into the nectar and pollen.

- Eliminate all insecticide use at your site
- Collaborate with neighbors to lower insecticide use in the area



This tool was developed by the University of Wisconsin-Madison Gratton Lab and the Dane County Environmental Council.

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