

Ask Steward: Native Bee Conservation for Montana Landscapes



Answered by [Abiya Saeed](#), Extension Horticulture Specialist, Montana State University.

Why is native bee conservation important for Montana and how can I incorporate “bee-friendly” practices into the landscape?

Pollinators, especially bees, play a vital role in our agriculture, economy, and ecosystems through the movement of pollen, which enables successful reproduction of several of our crops and many of our native plant communities. Factors including habitat loss, reduction in diverse and nutritious food resources, and improper/unnecessary application of pesticides all play a role in contributing to the global declines observed for several pollinator groups.

Many people do not realize that the diversity of bees lies far beyond just European honey bees, which are actually not native to North America. In fact, the number of native bees in Montana alone accounts for approximately 450 currently identified species, including the most bumble bees (28 species documented) of

any state in the U.S. However, Montana also has one of the least-studied bee faunas in the country. Because of the diversity of landscapes, topographies, climates, regions, and ecological zones in Montana, scientists estimate the actual number of bee species could potentially be as high as 1000. The Wild Bees of Montana project is currently underway to assess the diversity of native bees in the state. This puts us in a unique position to act as stewards of our native bees, through the incorporation of pollinator conservation practices in our home gardens and communities.

There are simple steps that we can all take to create a more ‘bee friendly’ landscape:

Incorporate a diversity of native plants into gardens.

- To maximize food resources for native bees, plant native flowers of various colors, textures, shapes, and sizes with

a diversity of bloom times. Early season (spring) and late season (fall) blooms are amongst the most vital since there are fewer resources available for bees and other pollinators during these times of year.

Create nesting habitat for bees.

- Leave small, undisturbed areas of bare soil in a garden to accommodate nesting habitat for ground-nesting bees. Most species of ground-nesting bees are solitary and are not aggressive, therefore will not sting. For cavity-nesting solitary bee species such as mason and leafcutter bees, incorporate a ‘bee hotel’ made up of wooden blocks with holes of varying sizes drilled into them, bundles of cardboard/bamboo tubes, or bundles of twigs and hollow or pithy plant stems. However, these types of above-ground nesting habitats do require some care so they do not become a place for diseases and parasites to build up and potentially harm bees. Make sure to read about and follow best-practices for properly caring for these types of nests.

Incorporate IPM strategies to minimize unnecessary pesticide use.

- Integrated pest management (IPM) is the utilization of a variety of tools to minimize pest problems in a way that is least harmful to the environment. Examples of this include scouting the landscape for pests, using mechanical/physical exclusion strategies, selecting and planting pest-resistant cultivars, learning to identify and enhance beneficial insects, and using pesticides safely to minimize off-target effects.

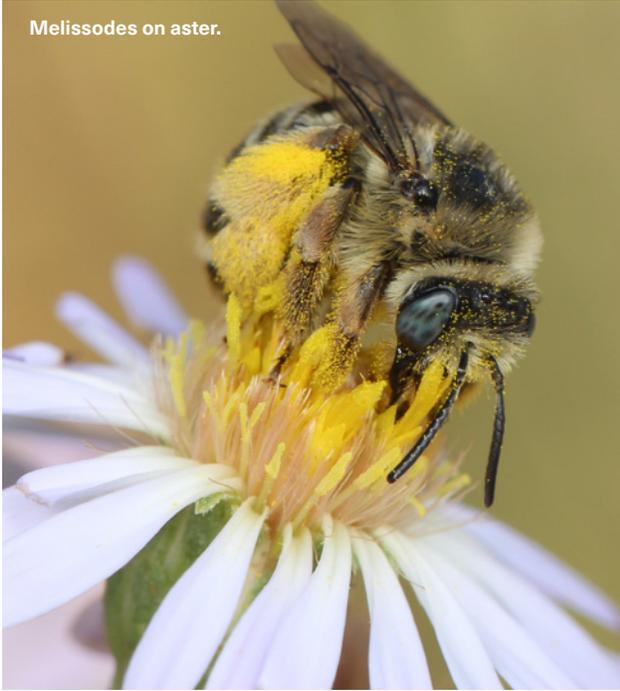
FOR MORE INFORMATION ON EACH OF THESE TOPICS, VISIT THE FOLLOWING RESOURCES:

<https://www.xerces.org/>

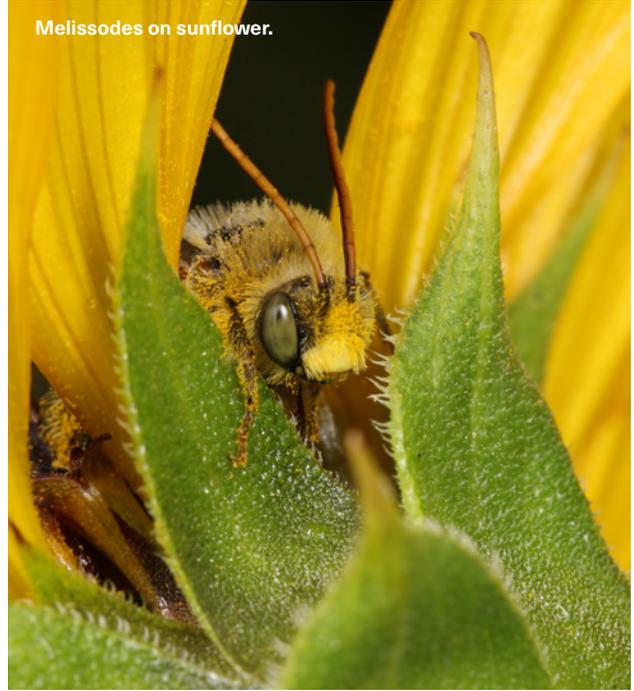
<https://www.pollinator.org/>

<https://ipm.montana.edu/>

Melissodes on aster.



Melissodes on sunflower.



Hylaeus on cleome.

