

How Can I Make My Garden More Biodiverse?

Many gardeners are asking this question in response to a new gardening movement that is telling us we can help address the biodiversity crisis by “inviting nature” into our own backyards, and, especially, supporting the pollinators. You might respond that you have lots of flowering plants, so what else is there to do? The following outlines six of the most important steps you can take.

1. Add Native Plants

Research suggests that our native bees prefer the nectar of native plants. This is because native plants have evolved with the bees and other wildlife over the millennia, as part of the ecosystem of our region. Biodiversity depends on the richness and health of this ecosystem, and native plants are the basic building blocks. There are many flowering perennials and shrubs that will provide the same beauty as your non-native ornamentals. You may not get the length of bloom achieved with some of your cultivars, but you just have to pay a little more attention to flowering times and ensure you have overlapping bloom through the three seasons.

2. Choose the Best Native Plants to Support Pollinators

We can take pollinator support one step further because some flowering plants support more pollinators than others. These are called keystone plants. For example, fall flowering asters and goldenrods support 33 and 42 bee species respectively. There are even native trees and shrubs that are superior, both for early spring nectar and for butterfly and moth egg laying. The oak is the top tree, followed by black cherry and willow. Also, some pollinators have developed a specialized relationship with one plant species or one plant family. Plant some of our local swamp milkweed and you will offer the Monarch butterfly the only plant family it chooses for egg laying. There is a native bee- the Blueberry Cellophane- that forages almost exclusively on our native low bush blueberry.

3. Reduce the Lawn

The lawn is a pollinator dessert. Why not replace your lawn with more native plant gardens while at the same time reducing mowing, excessive water and use of expensive inputs? You can leave some of the turf in place to serve as paths between the new beds. Remember to mow your turf high (at least 3”) to keep the grass healthier and help survive the drought times. If you have trees or larger shrubs, you could surround one or more with a groundcover bed. Mulch with fall leaves and this garden will provide a “soft landing” for certain insects that drop from the tree in the fall, in search of winter shelter.

4. Copy Nature’s Design

In natural areas such as woods you might have noticed a typical “layering “of plants: a hierarchy of low groundcover plants, mid-height herbaceous perennials and taller shrubs and trees, all in the same spot. Looking closer, you might find different insects and other wildlife at each level. It is this complex complementary mix that creates the greatest amount of biodiversity in an ecosystem. If you can create similar dense native plantings, you will go beyond just providing food (nectar) to supporting habitat for pollinators—for propagation, shelter and overwinter hibernation. You can provide more shelter by adding old logs, or a pile of brush or leaves. Dead plant stalks can be left standing in the fall because some bees overwinter or lay their eggs in the hollow stalks; and birds can feed on the seed heads.

5. Provide Water

Besides food and shelter, most wildlife requires water. A small pond will add even more biodiversity, but you can always just put out a shallow bowl of water. Put small stones or marbles in the bottom as a perch for tiny creatures. Put the bowl close to your door or near a water source so you can change the water.

6. Change Your Maintenance Mindset

A biodiverse garden requires a re-think of maintenance practices, starting with giving up on the ideal of “neat ‘n tidy”. Most of the changes previously outlined— dense plantings, brush piles, leaves as mulch and dead stalks as shelter—challenge this ideal. But why not change your outlook and take pleasure in the increase of texture, colour and variety of plantings? Another mindset change is to eliminate use of pesticides, because the good bugs will be killed along with the bad. There are other management strategies that can be integrated to control pests, with pesticides only viewed as a last resort. For a start, you can lose any fear of bees, which, when happily pollinating, have no interest in stinging people. Instead, bee-watching, along with the colour and movement of butterflies and birds—will add a new level of pleasure and joy to the beauty of your garden.

Resources

Books for Beginners:

The Pollinator Victory Garden by Kim Eierman (2020)

A Garden for the Rusty-patched Bumblebee by Lorraine Johnson & Sheila Colla (2022)

Nature’s Best Hope: A New Approach to Conservation that Starts in Your Yard,
By Douglas Tallamy (2019)

Canadian Web Sites

David Suzuki Foundation Butterflyway Project: <https://davidsuzuki.org/take-action/act-locally/butterflyway/>

Facebook group: Native Plant Gardening in Nova Scotia: <https://www.facebook.com/groups/388366295459453>

Canadian Wildlife Federation: <https://cwf-fcf.org/en/explore/pollinators.html>

Blomidon Naturalists Society (Nova Scotia): <https://blomidonnaturalists.ca/butterflyway-project/>