

Massachusetts Division of Fisheries and Wildlife: “How to plant a bumblebee-friendly garden”

The loss of bumblebees and other native pollinators can have devastating consequences on the biodiversity of Massachusetts. Learn how to plant your garden to help pollinators.

Spring is here, and that means many people are starting to plan and plant gardens and flowerbeds around their homes. Many native bumblebee species are in decline and can benefit from thoughtful gardening choices. Before you start planting, review the tips below to ensure your yard is a welcoming place for native bumblebees and other pollinators.

The decline of bumblebees

The number of bumblebee species in Massachusetts has dropped from 11 to 7, with 3 of the 7 (*B. fervidus*, *B. terricola* and *B. vagans*) in danger of disappearing from the state in the next decade if current trends continue. These losses can have devastating consequences for native biodiversity with cascading impacts across the ecosystem. The diversity of bumblebees impacts the diversity of native plants. In turn, these native plants provide food and homes to an array of insects and animals.

Multiple threats are contributing to the decline of bumblebees. Some threats, like introduced parasites, are very difficult to combat directly. Luckily, the effects of these threats may be offset by measures such as providing more habitat by planting a bumblebee-friendly garden.

Planting tips

- Avoid pesticide use, particularly those containing neonicotinoids.
- Avoid cultivars of native plants which don't produce floral nectar. In most plants, you can check for nectar by removing the flower from the base and squeezing it—a bubble of clear liquid means it has nectar. For species with a nectar spur, you can check for nectar by placing a light source behind the flower.
- Avoid exotic plants—they can have dramatic negative effects on bumblebee-native plant relationships and can contribute to bumblebee decline.
- Design plantings to ensure nectar and pollen are available for bumblebees throughout the entire growing season.
- Create nesting and overwintering sites. A dry, protected cavity containing straw, small clumps of moss, and/or dried grass located on or below the ground is ideal.
- Diversity matters! Bee abundance is not the same as bee diversity. Observe visiting bumblebees and notice if there are different species of bees.

Recommended native plants* for bumblebees

All bumblebees need adequate sources of floral nectar and pollen throughout their life cycle to keep populations humming. A truly bumblebee-friendly garden needs a variety of native plants that flower throughout the growing season.

- Aster (*Eurybia macrophylla*, *Symphyotrichum laeve*, *Symphyotrichum novae-angliae*)
- Bee balm (*Monarda fistulosa*)
- Blue flag iris (*Iris versicolor*)
- Boneset (*Eupatorium perfoliatum*)
- Carolina rose (*Rosa carolina*)
- Common buttonbush (*Cephalanthus occidentalis*)
- Dogbane (*Apocynum androsaemifolium*, *Apocynum cannabinum*)
- Goldenrod (*Solidago flexicaulis*, *Solidago odora*, *Solidago rugosa*)
- Joe-pye weed (*Eutrochium maculatum*)

- Meadowsweet (Spiraea alba, Spiraea tomentosa)
- Milkweed (Asclepias incarnata, Asclepias syriaca, Asclepias tuberosa)
- Old field toadflax (Nuttallanthus canadensis)
- Spiked lobelia (Lobelia spicata)
- St. John's Wort (Hypericum canadense, Hypericum punctatum)
- Spotted touch-me-not (Impatiens capensis)
- Swamp thistle (Cirsium muticum)
- Pasture thistle (Cirsium pumilum)
- Turtlehead (Chelone glabra)
- Virginia rose (Rosa virginiana)
- Wild yellow indigo (Baptisia tinctoria)
- Wild raspberry (Rubus occidentalis)

** Please note: Common plant names are provided in this list for easy reference, but always double check the species you purchase is native! Use the GoBotany tool to look up if a species is native.*

More ways to help bumblebees

Share what you're seeing in your garden and help scientists learn about the food source and habitat requirements of different species of bumblebee. The "Bee-cology" Project is a citizen science initiative that is crowdsourcing information about Massachusetts bumblebees. Learn more about the project and how to submit your observations.