



Make your yard a *Bee-Friendly Backyard*

New York is home to over 450 native bee species. Along with the imported honeybee these native bees pollinate agricultural crops and wildflowers. Bees aren't the only pollinators. Specialized flies, beetles, butterflies, birds and bats pollinate our flowering plants too. But honeybees are familiar and many people have heard about honeybee colony collapse disorder and its possible impacts on our food supply. In 2015, Governor Cuomo established an interagency task force on Pollinators, with several goals, including pollinator habitat enhancement. That's where you come in.

Did you know that your backyard can offer habitat and food for these pollinators? The choices you make in planning and caring for your landscape can affect pollinator abundance and species diversity. Just like us, these insects need shelter, food, and an environment safe from harmful chemicals. Here are four steps you can take to make a pollinator paradise.

- 1) **Give 'em Shelter:** Most of our native bee species are solitary and do not live in hives. Instead they nest in dead wood and in the soil. Create structural refuge with things like brush piles, woodpiles, and areas of exposed, undisturbed soil. That doesn't fit in with your landscape aesthetic, you say? Then follow step two!
- 2) **Make it look deliberate:** If a brush pile sounds messy, instead create a decorative wattle fence of bent twigs. Woodpile out of place in your landscape? Add a rustic arbor or bench made of natural, untreated wood. Even a split rail fence can harbor these solitary bees. The key is to create structure that persist through the season and to vary the types of structure so many different species are attracted to the garden.
- 3) **Dish up a variety of foods:** Many flowers provide nectar. But not all of our tiny solitary pollinators can handle the big flowers. Vary the sizes and types of flowers you plant. Plants in the mint family (both native and introduced) and plants in the "carrot" family, like dill and golden alexanders, have many small flowers that produce lots of nectar. They are attractive to look at and great for solitary bees and other beneficial insects. (See the websites in the sidebar for more plant ideas). When you purchase plants that flower, be sure to ask if those plants have been pre-treated with a pesticide.



A bumblebee visiting the native milkweed, *Asclepias tuberosa*, or butterflyweed. Bumblebees are excellent pollinators and use "buzz pollination" to take their services to the next level.

4) **Use pesticide knowledgably:** We understand that sometimes pesticides are needed in a managed landscape. Pesticides include not only insecticides but herbicides and fungicides as well, some of which are very toxic to bees. If you choose to use a pesticide, use it wisely. Remember that pollinators are attracted to flowers: you don't want to poison their food source!

- Avoid spraying plants that are flowering, or if you must spray them, use a low-residual pesticide and spray when bees are not active (early morning or late evening). Another option is to remove the blooms during the treatment window.
- Know the pest's lifecycle so that you are timing your treatment effectively.
- Use the least toxic pesticide with the shortest residual activity to get the job done. Pesticides that don't stick around allow pollinators and other beneficial insects to move back in quickly and safely.
- Be conscientious with pesticides that have systemic or long residual action. If they are deemed necessary be sure to remove blooms and understand that some systemic pesticides may be active in the plant for several years.

Citizen Science Pollinator Projects

You can get involved. There are many online and backyard projects that will help you create pollinator-friendly landscape. In the process, you will be helping scientists collect data on pollinators. If you have apple or other fruit trees in your yard, sign up to help with Cornell's Northeast Pollinator Partnership below.

Northeast Pollinator Partnership:

www.northeastpollinatorpartnership.org

The Great Sunflower Project:

www.greatsunflower.org

Pollinator Watch:

www.pollinatorwatch.org

Bumblebee Watch:

www.bumblebeewatch.org

Xerces Society:

www.xerces.org/pollinators-northeast-region/

Our Challenge to you!

Make your back yard a pollinator paradise. Let your neighbors know what you are doing in your pollinator friendly backyard. Announce your commitment with a sign from one of many bee-friendly organizations (see sidebar). Together our backyards, public gardens and parks offer the possibility for rich and diverse pollinator habitats. Make yours a bee-friendly backyard!

What's the Buzz? Building our Pollinator Garden

We are developing a pollinator garden and we'd love you to come visit. Master Gardener Volunteers and Cornell Cooperative Extension staff will incorporate the ideas suggested in this article to create a beautiful bee friendly space. You'll find ideas for your home garden--from patio planters to the back-forty--that include gorgeous native plants, and a wide variety of vegetables and fragrant herbs. Keep an eye on our calendar: we'll offer hands on workshops in the garden for the whole family. Check our website for more pollinator-friendly suggestions and garden updates: putnam.cce.cornell.edu



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