

Funding Opportunities for Individual Farmers

Three USDA (United States Department of Agriculture) programs which aid individual farmers establish pollinator habitat on their land include the Conservation Reserve Program (CRP), the Environmental Quality Initiatives Program (EQIP), and the Wildlife Habitat Incentives Program (WHIP). See the *Native Bee Benefits* resource listed below for a briefing on the operation of each program, or visit the USDA website for full information.⁸

Sources and Further Information:

¹ The Land Conservancy of NJ

<https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/newjersey/explore/the-buzz-on-pollinators.xml>

² NJ Biology Technical Note—NRCS

https://plants.usda.gov/pollinators/Habitat_Development_for_Pollinators_NJ.pdf

³ USDA/NRCS—Attracting Native Pollinators to Your Farm

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1101588.pdf

⁴ USDA—Improving Forage for Native Bee Crop Pollinators

Agroforestry Note—33: *Improving Forage for Native Bee Crop Pollinators*. Vaughan, M. and Black, S.H., 2006. USDA National Agroforestry Center. www.unl.edu/nac/agroforestrynotes/an33g07.pdf

⁵ How Gardeners Can Help Pollinators

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/plantsanimals/pollinate/gardeners/?cid=nrcsdev11_001102

⁶ Landscaping for Pollinators—Jersey Friendly Yards

<http://www.jerseyyards.org/create-a-jersey-friendly-yard/pollinators/>

⁷ Jersey-Friendly Plant Database—Jersey-Friendly Yards

<http://www.jerseyyards.org/plant/>

⁸ Native Bee Benefits—Bryn Mawr College and Rutgers University. May 2009.

Conservation Cover for Pollinators: New Jersey Installation Guide and Job Sheet

http://www.xerces.org/wp-content/uploads/2013/01/InstallGuideJobSheet_NewJersey_CnsrvCvr.pdf

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ECO-TIPS: Supporting Pollinators



Why Do Pollinators Need Help?

Pollinators are of vital importance to the Garden State. Wild pollinators are responsible for \$35 million each year in the farming industry, vital to the success of tomato, blueberry, melon, soybean, cucumber, squash, apple, peach, and bell pepper fields across NJ¹. Pollinator populations, particularly bees, are declining due to three threats: disease, habitat loss, and pesticides.

A wealth of flowers are necessary to support the native bee community throughout the year. In the past, farms were surrounded by forests and other open space which provided natural habitat to pollinators, drawing them to the agricultural area. Modern day farms and other open spaces often lack the diversity and abundance of flowers to attract and support native bees, due to lack of edge habitat and heavily managed lawns and roadways.³ Managed honey bee hive populations in the US are now half of what they were in the 1950s.⁴

Habitat Needs:

Pollinators feed off the pollen and nectar produced by plants, and deposit pollen from male plant parts to female plant parts through their travels. This job is performed by many pollinators including butterflies, moths, hummingbirds, bats, and most importantly bees.⁶ Keeping a diverse array of plants which bloom at different times will support pollinators for a longer period and ensure they stay around throughout the growing season. Two easy ways to support pollinators are to provide food and shelter:

- **Food**—pollinator friendly flowering plants help to attract native bees and other insects. Aim to have native plantings with a diverse array of colors and blooming times to maximize pollinator attraction and provide nourishment throughout spring, summer, and fall.⁵
- **Shelter**—Pollinators need shelter in a hive or other cavity, the ground, or wood. In contrast to the English



(Above) a healthy flower garden on an arboretum provides additional habitat to help sustain pollinators in various seasons in Monmouth County. Earth Friendly Organic Farm, Clarksburg, NJ.

Honey Bee's hive, the majority of native bees are solitary ground-nesting bees. Limit tillage to only necessary areas to avoid disturbing ground sites. Wood-nesting bees make individual homes in beetle tunnels left in dead trees or fallen wood. Consider leaving a tree trunk in place to provide bee habitat, or place artificial nesting structures, such as nesting tubes, near a pollinator field.³ Pollinators can also benefit from a supply of clean water in a birdbath or dish with half-submerged stones.⁵

If You Must Spray:

Pesticides, especially insecticides, can negatively affect pollinators—even if they are not the target pest. Limiting or avoiding the use of pesticides will help protect pollinators and maintain their populations. If you use pesticides, aim to limit damage to pollinators by:

- Avoiding application to flowering plants
- Spraying during dry, calm, controlled conditions
- Spraying right after dusk, when bees are least active
- Using the least possible toxic formulation.³

Pollinator Habitat on Farms

It is important to diversify the pollinators a farm relies upon for crop pollination, and to supply habitat for them. With increased development, habitat has been lost, and farms are having a harder time attracting and retaining bees and other pollinators. While crops may provide food for pollinators, a lack of shelter and a lack of plant diversity may stop the pollinators from frequenting your area. A farmer can insert a flower meadow on the edge of a field, or surrounding a structure on their farm.

Pollinator Habitat at Home

Native plants provide the best source of food for pollinators, as well as providing them their preferred nesting material, predator protection, and weather shelter. Jersey-Friendly Yards (Jerseyyards.org), features numerous resources for pollinator conscious homeowners to consult, including a [Plant Database](#), listing of where to buy native plants, and the opportunity to [ask an expert](#).

- Common, Swamp, or Butterfly milkweed

(Below) A bumblebee pollinates a *Liatris* plant.



Beneficial Plant Species for NJ Pollinators ^{2, 7}

- Black-eyed Susan
 - Jewelweed
 - Evening Primrose
 - Purple Coneflower
 - Goldenrods (*Solidago* spp.)
 - Asters
 - Sunflowers
 - Crocuses
 - Blazing Stars (*Liatris* spp.)
 - Clovers (*Trifolium* spp.)
 - Sage (*Salvia* spp.)
 - Sedum (*Sedum* spp.)
 - Trees including Maple, Tulip, Holly, Cherry,
- Plum, Willow, Blackgum, Basswood, Dogwood (*Cornus* spp.)
 - Shrubs including Blueberry Bush, Sumacs (*Rhus* spp.), Rhododendrons, Beach Plum, and Elderberry Plants (*Sambucus* spp.)

Visit the online "[Jersey-Friendly Plant Database](#)"⁷ or contact the local Rutgers Cooperative Extension for other NJ Pollinator Friendly plants, especially if installing pollinator habitat on farms.