Farming for Pollinators

Native Bees and Your Crops

Native bees are valuable crop pollinators. These wild bees help increase crop yields, and may serve as important insurance when honey bees are hard to come by.

Here are two things that you can do to begin improving habitat for native bees on your land:

1. Know the habitat on your farm. Using the illustration in this brochure as a guide, look for areas on and around your land that can support native bees.

2. Protect flowering plants and nest sites. Once you know where bees are living and foraging, do what you can to protect these resources from disturbance and pesticides.

3. Enhance habitat with flowering plants and additional nest sites. Adding flowers, leaving some ground untilled, and providing bee blocks (tunnels drilled into wood) are all ways to increase the number of native bees on your farm.

Critical Requirements of Native Bees

Food. Bees eat only pollen and nectar. In the process of gathering these resources, they move pollen from one flower to another, and thus pollinate your crops. Bees rely upon an abundance and variety of flowers, and need blooming plants throughout the growing season.

Shelter. Native bees don’t build the wax or paper structures we associate with honey bees or wasps, but they do need places to nest, which vary depending on the species. Ground-nesting bees are solitary, often making individual nests in beetle tunnels in standing dead trees. Ground-nesting bees include solitary species that construct nest tunnels under the ground. Cavity-nesting social species—bumble bees—make use of small spaces, such as abandoned rodent burrows, wherever they can find them.

Protection from pesticides. Most insecticides are deadly to bees, and unnecessary herbicide use can remove many of the flowers that they need for food.

We have the good fortune of being home to many native pollinators, including blue orchard bees. We believe that our being chemical free helps our bees flourish, and they in turn help produce some of the sweetest berries in the whole country.

Mandy McCormick
Blue Tara Organic Blueberry Farm
Poplarville, Mississippi

Most native bees are unlikely to sting. The yellowjackets and other wasps you see eating rotting fruit and hanging around picnics are not bees, nor are they significant pollinators.
Riparian Buffers
Food and Shelter
Habitat along streams should contain a diversity of plants. Willows, in particular, will nourish bumble bee queens in the spring so that large numbers of workers are available when crops begin to bloom.

Snags
Shelter
Keeping dead trees standing provides shelter for native bees. Some solitary bees build nests in abandoned beetle tunnels in snags.

Fallow Fields
Food and Shelter
Even small areas of fallow or unproductive land, especially when sown with native flowers, can offer important resources for native bees.

Pesticides
Insecticides kill pollinators outright, and herbicides may destroy plants important for both food and shelter. It is preferable to minimize your use of pesticides and to carefully choose products and application methods.

Field and Road Edges
Food and Shelter
Leave areas next to fields untilled and unsprayed to support flowering plants and provide nest sites for ground-nesting bees.

Ponds and Ditches
Food and Shelter
When you create a pond or ditch, leave the pile of excavated soil. Ground-nesting bees may build nests in stable, bare areas of this mounded earth. Planting clumps of native flowers will attract more pollinators.

Hedgerows or Windbreaks
Food and Shelter
Creating hedgerows with a wide variety of plants that have overlapping flowering periods will provide bee habitat throughout the growing season and strengthen populations of natural enemies of crop pests.

Gardens
Food
A vegetable, flower, or herb garden, with a diverse assortment of plants, is a good source of food for pollinators. Be wary of fancy hybrids that may produce little pollen or nectar.

Temporary Bee Pasture
Food
Planting fields with canola or other inexpensive seed—or allowing crops such as lettuce, kale, basil, and broccoli to bolt—will supply bees with nectar and pollen.

Cover Crops
Food
Flowering plants—certain legumes in particular—can be included in cover-crop mixes to supply pollen and nectar.

Artificial Nests
Shelter
Making bee blocks for wood-nesting bees is a good way to increase the number of native bees in your landscape.

Natural or Undeveloped Areas
Food and Shelter
Nearly natural areas may harbor all the native bees needed to pollinate your farm’s crops. Consider inviting your neighbors to help with safeguarding these habitats.

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