

*Bees are important pollinators for our crops. There is much concern recently with declining populations of bees. Here are ways all of us can help bees.* Bill Craig <https://www.beelab.umn.edu/bees/helping-bees>

# Helping Bees

Bees play a keystone role in the productivity of agriculture and the beauty of our world through the pollination of fruits, vegetables, nuts, and flowers. The disruption of natural habitats leading to lack of “bee flowers,” the widespread overuse of pesticides, and numerous bee diseases and parasites have pushed honey bees to the tipping point. This honey bee crisis is broadly termed Colony Collapse Disorder. Our native bees are also in decline due to unprecedented habitat loss, pesticide contamination, and their own diseases.

You can help bees in four ways:

1. Plant bee flowers everywhere
2. Provide nesting habitat
3. Keep bee flowers clean - do not treat bee-friendly flowers with pesticides (insecticides, fungicides, herbicides, etc.).
4. Support our efforts to keep bees healthy and on their own six feet

## What are bee flowers?

Bee flowers provide abundant nectar and pollen for bees. Bees obtain all of their carbohydrates from floral nectar, and all of their protein from floral pollen. They convert the nectar into honey, and use the protein in pollen to feed their young. Learn [which flowers in Minnesota provide vital nutrition for bees](#) (.pdf). Also learn [which flowers provide vital nutrition for bees in your region](#). Join [The Great Sunflower Project](#) along with more than 100,000 other citizens to plant bee-friendly plants and hunt for bees - a great school project!

## Nesting Habitat

Most bees (between 60 and 70%) dig burrows in the ground. These bees prefer dry, sandy soil bare of vegetation, often on hillsides. You can attract ground-nesting bees simply by making sure to leave some spots of exposed, undisturbed soil in your yard.

The other 30-40%, the cavity-nesting bees, require a bit more effort. These bees use hollow plant stems or holes in wood left by wood-boring beetles, instead of digging their own tunnel in the ground. A nesting bee will use mud, leaves, or another material to build walls and divide the tunnel into a linear series of small, sealed cells. Each cell contains a lump of pollen and an egg, which usually takes one year to develop into an adult bee and the cycle can begin anew. You can attract cavity-nesting bees by providing tunnels in a man-made structure called a bee house—like a bird house for bees. Three common types of bee house are stick bundles, wood blocks and observation blocks.

[More Nesting Information](#)

## Pesticides?

Pesticides include insecticides, fungicides and herbicides. Insecticides are designed to kill insects and depending on formula and concentration can be harmful or fatal to bees and other beneficial insects. Fungicides may have detrimental effects on bee nutrition if they destroy beneficial yeasts and microorganisms in bees' guts. Herbicides kill the weedy flowers that provide nectar and pollen for bees. Please be safe and judicious with the use of pesticides. Read the label (or look up the active ingredient on the internet) to determine its toxicity to bees.

MN Department of Entomology Pollinator  
conservation: <http://cues.cfans.umn.edu/old/pollinators/index.html>

Koch, R.L. and M. Spivak. 2013. Protect pollinators while trying to protect your crops. Minnesota Crop News. August 5, 2013. <http://blog-crop-news.extension.umn.edu/2013/08/protect-pollinators-while-trying-to.html>

## Support Our Efforts

Create a legacy by helping us build a new [bee research and discovery center](#).