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## Why are we losing our honey bees?



Have you noticed that you don't see as many honey bees around as you used to? Are you seeing fewer bees on your white clover, in your garden, and on your flowers? Well, that's because there are fewer honey bees in the United States than there have been since the 1950s.

### Why are there fewer bees?

Mites and pesticides. Two parasitic mites – the tracheal mite and the varroa mite- are like little blood-sucking vampires on the honey bees. The mites were introduced to the U.S. in the 1980s. The mites feed on bee 'blood' and will eventually kill the bee. Infected colonies of bees lose strength and in time the colony will die.

Beekeepers treat their hives with chemicals to kill the mites and keep the colony alive as long as possible.

Despite the effort that beekeepers make to keep honey bee colonies alive, millions of colonies have died. Since 1990 we have lost one quarter (almost 1 million) of all managed honey bee colonies. And in recent years, some areas have lost almost 100% of their wild honey bee colonies. Wild honey bees cannot survive because there is no beekeeper to medicate them and make sure they live. So it's no wonder you're seeing fewer honey bees!

### Why do fewer bees matter to me?

Food and flowers! One-third of our diet is made up of foods that require or significantly benefit from pollination by honey bees. Those foods include everything from apples to tomatoes to cucumbers. How boring would your diet be without the fruits and vegetables that need to be pollinated by bees?

If you grow your own fruits and vegetables you might already know what fewer bees mean to you. Have you ever had very few or very small apples on your trees? Small, C-shaped cucumbers? Raspberries that aren't properly shaped? These are all problems with pollination. When bees pollinate flowers they help seeds grow. Plants grow the best fruits when there are lots of seeds on the inside of the fruit. Fewer pollinating bees mean less pollination, less pollination means fewer, smaller fruits.

Even when we realize what honey bees mean to our food supply, we still need to think about the pollination that goes on in the wild. Scientists haven't even calculated what bees and other pollinators mean to wildlife and wild spaces.

#### What can you do? Protect pollinators! Help the bees!

- Don't use unnecessary pesticides. Bees are sensitive to chemicals. Don't spray pesticides on blooming plants because when the bees are visiting the flowers they might accidentally get into the pesticide. When you do need to use a pesticide, try to use one that is not toxic to bees and spray when bees aren't around.
- Provide nesting sites for bees. Honey bees nest in hollow trees and other cavities, so if you can leave that space for them, please do. You can provide nesting sites for other bees (like bumble bees and leaf-cutter bees) by drilling holes in untreated lumber and putting the lumber in a warm, sunny area. Chances are pretty good that bees will move in and use those boards as nests. You can also leave brushy areas undisturbed so bees can keep their nests from year to year.
- Provide food sources for bees. The flowers in your garden are a great source of pollen and nectar for busy bees. Plant a variety of flowers that will bloom from spring through fall. You can get a list of bee-friendly plants from your County Extension Office.
- Appreciate and protect the pollinators you already have. Although you might not like the carpenter bees that use your porch as a nesting site, they are out there pollinating your garden! If you think about how important bees are, then hopefully you won't spray them with insecticides. If bees are a problem where they are now, then try to make another nesting site more attractive to them.
- Become a beekeeper! Beekeepers, like all of us, are getting older. The problem is that like other farmers in the U.S., they aren't 'replacing themselves.' That means that beekeeping experts are retiring or dying and there aren't other people to take their places. Most beekeepers are nice people who are very excited to share their knowledge with newcomers to the field. Contact your County Extension Office to find out if there is a beekeeping group in your county.