You can make a difference

The shift to organic practices is a necessity that is protective of health and the environment, sustainable and cost effective. The bees should serve as a warning because our very existence depends on theirs.

1. Make your yard or local park a “Pesticide Free Zone” and take steps to encourage pollinators you can take to attract these beneficial insects to your garden and protect them and their habitat. Like any other living organism, bees need food, water, and shelter in order to thrive.

- Pledge your yard or park as Pesticide Free Zone/Honey Bee Haven and mark it on the map!
- Display a Pesticide Free Zone sign and show your neighbors that pesticide-free spaces are important for health and the environment.

2. Become a backyard beekeeper
For those who may be feeling highly motivated, there is also the option of keeping your very own colony of bees in your backyard. Although not all bees live in hives; certain species, notably honeybees, are easily and safely kept in artificial hives for their shelter. This provides a safe haven for the bees while also allowing you the opportunity to harvest the fresh honey! Join the Marin Bee Club.

3. Go Organic
Choosing organic food is not only good for your health, but it also helps protect honey bees and wild pollinators. In addition to serious health questions linked to actual residues of toxic pesticides on the food we eat, our food buying decisions support or reject hazardous agricultural practices, protection of honey bees and wild pollinators, as well as contributing to healthy working conditions and communities for farm workers and farm families.

4. Urge Congress to act!
We joined beekeepers and partners in filing a legal petition that calls on EPA to suspend registration of Bayer’s controversial bee-killing pesticide, clothianidin. We also delivered over a million signatures from individuals around the world calling on the Agency to take decisive action to protect honey bees from neonicotinoid pesticides before it is too late. But, bees are still dying. Congress has the authority to exercise oversight over federal agencies like EPA. We will continue to pressure EPA to take action on clothianidin.

Why Protect Bees?

PESTICIDE FREE ZONE

How to Protect Bees

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Short intro to Bees

Honey bees are one of the most well-known, popular and economically beneficial insects. For thousands of years man has plundered honey bee colonies to get honey, bee larvae and beeswax. Now, honey bees are commonly kept in artificial hives throughout the United States. Although many people make a living from bees, most beekeepers are hobbyists who have only a few hives and who simply enjoy working with these fascinating insects.

Many valuable crops benefit from insect pollination (the transfer of pollen from one flower to another flower). This process increases fruit yield and, often, the size of the fruit. Honey bees are important pollinators because they can be managed and easily moved to crop sites, for this one colony per acre is commonly used.

Honey bees, like ants, termites and some wasps, are social insects. Unlike ants and wasps, bees are vegetarians; their protein comes from pollen and their carbohydrate comes from honey which they make from nectar. Social insects live together in groups, cooperate in foraging tasks and the care of young, and have different types, or "castes," of individuals. There are three castes of honey bees:

**Workers**: Reproductively underdeveloped females that do all the work of the colony. A colony may have 2,000 to 60,000 workers.

**Queen**: A fully fertile female specialized for producing eggs. When a queen dies or is lost, workers select a few young worker larvae and feed them a special food called "royal jelly." These special larvae develop into queens. Therefore, the only difference between workers and queens is the quality of the larval diet. There is usually only one queen per colony. The queen also affects the colony by producing chemicals called "pheromones" that regulate the behavior of other bees.

**Drones**: Male bees. A colony may have 0 to 500 drones during spring and summer. Drones fly from the hive and mate in the air with queens from other colonies.

The Bees are in trouble

Honey bee brood and adults are attacked by bacteria, viruses, protozoa's, fungi and exotic parasitic mites but in most cases they can take care of these problems. But when stressed due to environmental contamination from pesticides that disrupt their nervous system as do the neonicotinoid pesticides, bees abandon their hive. (Colony Collapse Disorder or CCD)

EPA knows enough to act. They have the authority and responsibility to suspend Bayer's bee-toxic pesticide, clothianidin — yet for over a year the Agency has failed to do so. Neonicotinoids like clothianidin are not the sole cause of CCD, but they are a key part of the problem, and at least one of them is on the market illegally.

Backyard gardeners, hobbyist's beekeepers and ordinary people all over the country have been stepping up. On the next page are things you can do to help the bees.

Beyond Pesticides and Pesticide Free Zone collaborated to produce our cute Pesticide Free Zone Bee sign. Become part of the national movement by contacting Beyond Pesticides and getting on the national map.