Letter to you, Neighbor

Dear Neighbor,

Lately you have heard news about honey bees disappearing and colonies dying, and you want to know what is happening. You also may wonder what you could do to help honey bees. Let us tell you what we can. First, the many scientists working on this problem have been making progress, but it is still limited by lack of funding, and so far we do not have concrete answers as to the cause of Colony Collapse Disorder (CCD). But to answer your second question, we took some time to make a list of some simple, and not so simple, ways you can help honey bees. So here goes - <u>Ways you can help honey bees</u>:

There is little to fear with bees in your yard and neighborhood. By nature, honey bees are only defensive (likely to sting) when their nest is threatened. Sure, you might step on or accidentally pinch a bee and get stung, but millions of people walk, bike and jog through parks and gardens all the time and are not stung by bees foraging there for food for their hive. Wear shoes and socks if you are walking through yards and fields of clover and plants attractive to bees. If you find a nest of honey bees (usually in a tree or the side of a building), leave them alone and call in a beekeeper for removal if they are in a bad place. Honey bee nests will survive from year to year - the bees are not likely to go away unless destroyed by parasitic mites or other pests or predators. Learn to recognize other insects that look like bees. The yellow jackets and paper wasps are not bees. They are both wasp species, and may become defensive while you are on a picnic in the park. They are the insects that seem to want to fight over your hamburger. These are primarily meat eaters, but enjoy a tasty fried potato or sip of soda. Many yellow jackets make paper nests in the ground and in bushes. The hornets nest in paper nests in trees, and the paper wasps make nests in protected areas of buildings (such as under eves). They may be killed by using one of the over-the counter pesticides if they are in a bad place (near playing children) - but as a group they feed their young caterpillars and insects. These nests do not survive the Winter. Honey bees (like all bees) are vegetarians and collect pollen (their protein source) and nectar from plants and water where they can.

If you have a flower or vegetable garden, you probably already have honey bees making pollination visits to certain flowers. They are essential for the successful pollination of a long list of fruits, berries and vegetables, so expect to see them on your fruit trees, berries, squash, melons and cucumbers. For the country, honey bees provide over 18 billion dollars worth of food production – some say that is one bite out of every three! For the home garden they contribute to the food you enjoy and need for proper nutrition. Many home gardeners have noticed that there are fewer honey bees "doing their job." Many wildflowers and in the garden attract bees, butterflies and other pollinators. I encourage you to get a list of bee plants from your local or state extension service and plant them along with your butterfly plants. In California, the extension service has prepared a list of native plants and shrubs that are helpful to honey bees. Many of these plants require minimal water and management. Don't give up, as many states do not support bee programs as well as others.

Starting in the Spring, provide a constant water source for bees. Bees are attracted to water in a number of different situations. If you establish a waterfall in the garden, or have a decorative pond or pool, expect the bees to gather at the edge to gather water for the hive. During

the Summer a hive of bees will require as much water as the pet dog, so don't be surprised to find dozens of bees gathering water. Here's the key point: by establishing the water source early in the season, the bees are less likely to visit swimming pools and bird baths. They may be attracted to the salt and minerals of these sources, which is why its good to see folks have a place for bees to gather water that does not put the bees in close contact with humans and pets. If bees start to cause problems at a swimming pool, consider covering the pool for a few days until the bees will move to another source.

Plant bee flowers in your garden and bee attractive trees wherever you are able. If you live in a city that has extensive park and city landscapes filled with trees - they could all be that the bees could forage upon and get food. In the past, cities planted thousands of trees that bees like to visit for nectar and pollen. Between the sidewalk and the road, large basswood trees, also called Linden or lime tree, are great for bees. It is common in many cities and is an excellent nectar source for bees. It makes a very tasty honey! Streets could have several basswood varieties and they would bloom over several weeks in the late Spring. Tulip popular trees have large magnolia-like blooms in April and May. It is a beautiful tree with tulip-flower-shaped leaves and hundreds of large yellow and green blossoms. One tree will not produce a lot of honey, but a city filled with these trees will keep a lot of bees alive. The nice thing about these trees, when they are mature, is that when they are in full bloom - you don't usually know it unless you hear the faint murmur of bees as they work the over your head.

<u>Work to have your entire community to "think natural pollinators"</u> when it sets out to design parks, recreational areas and walking/riding trails. If you are concerned about having people and bees in close contact, think up something clever, like "Do Not Disturb – Natural Pollinators At Work!"

Reduce mowing and let beneficial nectar and pollen producing plants grow - Many plants produce above the mowing height of most lawnmowers, so every time the plant is ready to bloom the top of the plant and all the flowers are cut off. I agree that a ball field or playground should be mowed while it is in use by children and adults, but once the season is over the grass and other plants could be allowed to grow to six to 10 inches in height so plants like white clover, birdsfoot trefoil, and alfalfa are able to grow and flower. Once the blooming season is over the area may be mowed and will be ready for the next year.

Consider a bee blend of seed for large lawns. What is the advantage of huge lawns that require high-energy fuels to mow, feed and establish pest control? Why not plant of blend of grass seed with white or alsike clover, trefoil, and low growing asters to keep below the mower height and still look great at a distance? The clovers and other legumes house nitrogen-fixing bacteria in their roots, and the lawn around them will actually be greener than the surrounding grass. This will reduce the need for fertilizer applications. If you plant these plants and manage them well with conservative watering and mowing you will have an attractive lawn at lower costs and management time. If you are a grass fanatic, why not plant the areas around the house with the lawn of your dreams, and then let the other areas go natural to support bees and other pollinators.

Encourage state and federal officials to develop areas of roadways and parklands that may be planted to plants beneficial to honey bees. There are many plants that will grow in these areas, including a few species that may be considered invasive by certain folks. But what is wrong with a roadside filled with blooming knapweed rather than grass? The Eastern/Midwestern species of spotted knapweed will produce lots of nectar in the lavender during July and August.

Work within various "Green" organizations to make the honey bee a welcomed insect in environmental areas. True, Jamestown settlers imported the honey bee from Europe in 1622, and since then it has become one of the most dominant pollinators in North America. Many plants depend upon honey bee pollination, and while there are many thousands of other pollinator species, humans have destroyed many of their habitats, their food sources and in some cases their existence. The honey bee is one species that visits many different plants and benefits them by setting seeds and ensuring the future of the plant species. Indeed, the smart thing is to use honey bees in conservation areas will help establish the plants many of the native pollinators need to survive. Certain other bee species need to be encouraged as well. We need bumble bees to pollinate tomatoes and help pollinate blueberries - they do a better job than honey bees. Bumble bees are able to buzz the flower to cause pollination, and the honey bee is unable to do that.

Don't use pesticides when the flowers are open and the bees may be flying. Some insecticides are very deadly to honey bees, so always be sure you read the ENTIRE label before applying an insecticide, and when you do, use the recommended amount, no more. Most fungicides and herbicides (like Roundup) do NOT affect honey bees directly. Certainly the whole point of the herbicides is to kill plants, some of which may attract bees for food. Only kill those plants that need to be killed. Let the roadsides grow with milkweed, sweet clover, goldenrod and aster. In addition to being helpful to the bees, it is a lot nicer to look at than dying plants and bare soil where everything has been killed.

Support those Senators and Congressmen who are working to increase funding for honey bee research, and all pollinators as well. Find the elected officials in your state that are supplying research and education funding at your local universities and schools. Your future and that of your children and grandchildren is at stake.

Think about keeping a hive of bees yourself. There are beekeeping organizations in this very area that conduct beekeeping classes in the Winter and Spring. Most folks start their first hive in the springtime. If you decide to do this, find someone who will mentor you in your training as a beekeeper. It will probably take you several years to learn enough to feel comfortable keeping bees, but it is a great part time activity, and people of all ages are in beekeeping classes, from school students to retirees. The truth is we need more beekeepers throughout the country. (You can find a list of bee organizations on the Beeculture magazine's website: www.beeculture.com). Google "Local Beekeepers" and be amazed at the information available.

<u>Support American beekeepers</u>. Buy and use U.S. honey. And when you do, pick a local beekeeper's honey rather than honey imported from another country. By supporting your local beekeeper you are supporting the pollination of local food supplies, and you will be helping a neighbor rather than a stranger. Plus, some allergists claim that there are medical benefits from eating local

honey to reduce the impact of pollen allergies, claiming that local honey contains local pollen. Most local beekeepers do not heat and filter out all pollen, so look for a local honey from local flora sources the next time you are at a farm market, grocery store or fair.

There are a few things you should learn not to do if you want to keep bees. Do not leave empty soda cans and bottles in trash containers. In the late Summer and Fall there are fewer flowers for bees to visit, so the foragers look for something sweet, and if they find unfinished sugar or corn-sweetener soda cans and containers in the trash, they will learn to look there and collect the sugar rich liquid. Prompt trash removal and closed containers eliminate potential issues with bees around trash cans. If you or your children have unfinished soft drinks or other sugary foods, empty them down the drain before dropping the container into the trash. If you plan to keep your drink, put a lid on it!

Finally, it is important to prevent a ban on keeping bees in your city, town or residential area. The bees managed by a well-trained beekeeper pose little concern, and feral swarms in hollow trees and unmanaged situations also result in few dangerous encounters. In southern parts of the country

where the African bees are becoming established, the smart community supports beekeepers and encourages them to manage a conservative number of beehives filled with European bees within the area - this provides a means of competing with African bees. Otherwise the only bees in the area will be feral colonies, located in unexpected places like water meters, mail boxes and upturned flower pots. The beekeeper is the solution to the African bee problem, and is not the problem itself.

Well, neighbor, I hope this has helped. Feel free to make a copy of this and pass it along to your friends and family. "Become a beekeeper. There's a wealth of resources available to help!"

Contact Gateway Beekeepers Assn: gatewaybeekeepers.org