

# **An Inside Look at Bees: Interviews with the Experts**

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In order to support bees and other pollinators it is important to continue to build knowledge about how to help the bee population flourish. One way to accomplish this is to have open conversations with bee experts, sustainable beekeepers, and others about the importance of bees. A colleague and I interviewed three pollinator experts; an avid gardener, a professor and an experienced beekeeper, to learn more about bees, beekeeping, and other pollinator matters. I am sharing these interviews with you as they provide valuable information and firsthand experiences regarding bees and other pollinators, which can help us all to expand our knowledge about these amazing creatures. Enjoy!

## **Interview 1: Dave (avid gardener and bee expert)**

- *What got you into beekeeping?*
  - I was always fascinated by bees ever since I was a little kid. When I went to graduate school and finally had a place of my own, I thought it would be a great opportunity to finally start my journey into beekeeping. So I went for it! I have loved it ever since I got my first hive and have always had bees around.
  
- *What are the main hurdles of civic beekeeping?*
  - We are lucky in our community that there are not too many hurdles to beekeeping here. One of the main issues tends to be nervous neighbors. Many people are afraid when someone that lives near them gets bees because they think the bees will harm them, but the more conversations you have with people about bees, the more understanding they become of the importance of bees and how great bees really are for everyone.
  
- *What is your advice for people who are afraid to beekeep or are just beginning?*
  - Come try beekeeping with me or someone you know that beekeeps. When people are able to check out beekeeping for themselves and have a hands on experience, their perception completely changes. I would make sure that the colony I show them is gentle in order for them to become comfortable with the concept of beekeeping and realize how fun it can be.
  
- *How do you keep a successful beehive?*
  - I don't! It is very difficult to keep a successful hive. My advice for keeping a successful hive would be to leave the bees alone for the most part. Make sure to put the bees in a safe space where there is nothing poisonous that could cause the hive to fail. Try to grow food for them, plants they enjoy will help them to be productive. Another main point is to not be eager to get honey. You have to let the

bees do their thing and know when it's okay to harvest some honey and when you should just leave it there for the bees.

- *Do you grow specific kinds of plants for your bees?*
  - There are not really specific plants that we grow. We have some fruit trees and they like the maple tree, but it's more about just making sure that there are plants that are growing throughout all of the seasons that the bees have access to. During the seasons that are difficult for them to find food, it is important to keep some plants around for them.
  
- *What are your ideas for how to handle colony collapse? Would having more people take up beekeeping help?*
  - It could be helpful to have more people beekeeping, but as I once heard, having too many beekeeping folk could scare off the native bee population. A huge aspect that would help is for more people to become educated on how important bees are for the world. Getting people to plant their gardens with plants that bees enjoy would also be helpful. Something else that would be a major help is if people eat organic. If people begin buying more local and organic products that are not grown with pesticides and chemicals, this will help the bee population a lot since the toxins that non-organic growers use to produce food kills the bees.

## **Interview 2: Peg (professor and bee enthusiast)**

- *What makes a sustainable and strong pollinator habitat?*
  - Making sure to have a diverse group of plants that will bloom throughout the year. Also, finding plants that bees enjoy, such as herbs. Having a space that the bees will enjoy and can have their own space is also important.
  
- *What are your ideas to promote more bee friendly landscapes in your city?*
  - It is important to reclaim space. For example, planting flowers around the outskirts of buildings and at parks or other locations that have space. Creating pollinator hedgerows along highways and other areas that may not be typically thought of to utilize. In alleyways behind neighborhoods, there is usually a lot of usable space that would be perfect for creating bee friendly landscapes.
  
- *How are native bees different from commercial bees? Could using native bees instead of commercial bees be a solution for colony collapse disorder?*
  - The main difference is the nesting area, different types of bees prefer to live in varying areas. Honey bees also tend to have a wider interest in that they enjoy a larger range of flowers. However, all bees tend to have the same interest in many plants. Also, native bees are good for cold weather because they will pollinate more during this time, which will help the honey bees to get a head start.
  
- *What are your ideas for how to handle colony collapse?*
  - It is very important to provide blooming flowers throughout the year for the bees. Also, people need to be more aware of which flowers have pollen and which flowers have less, such as daffodils. If people plant more flowers that have pollen, it will help to stabilize the bee population. It is also important to stay away from invasive flowers. Bees love herbs, so planting a lot of herbs will not only benefit your kitchen, but also the bees. Also, native bees tend to not be as vulnerable to colony collapse.
  
- *What are the main aspects we should focus on to prevent colony collapse?*
  - The top three things that we could do to prevent colony collapse include:
    - First, provide plants for bees throughout the year.
    - Second, make sure to not use any insecticides as they will kill the bees.
    - Third, try to create more nesting habitats for bees and more ground areas for bees.

## **Melissa (experienced beekeeper)**

- *What got you into beekeeping?*
  - The sound of silence - missing the bees humming in the flowers as I worked. In spring of 2005, the Ceanothus bloomed in several of my gardens and I noticed there were no bees foraging on their blossoms. Ceanothus is normally wildly popular with the bees, they get kind of drunk on the nectar. In fact, I noticed very few bees in my gardens all that year, which was alarming. I heard about the phenomenon called 'Colony Collapse Disorder' and wanted to see what I could do to help. I had to travel 1.5 hours outside of where I live to take my first class. Thankfully there are more beekeepers now, making it much easier to find a teacher!
  
- *What are the hurdles for civic beekeeping?*
  - #1 Herbicides & Pesticides: A common misconception is that herbicides and pesticides are used only on agricultural land. Having designed, built and maintained over 130 acres of landscapes and gardens in the Willamette Valley and in the Columbia Gorge in the past 23 years, I can tell you from firsthand experience working in a lot of ground over a wide area that there is an enormous amount of spray and coated seed containing neonicotinoids that is applied to urban, suburban, mixed-use and commercial land, on public parks, school grounds, roadways and waterways. (See discussion below of neonicotinoid pesticides). Bees forage within a two to five mile radius from their hives, gathering nectar and pollen from flowers, collecting minerals from the soil and resins and dews from plants and drinking water, so whatever pesticides and herbicides are in the soil, plants and water eventually end up in the hive with deleterious and sublethal effects.
  - #2 Lack of Forage/Plant Diversity/Extended Season Blooming Plants: Lawn is a food desert for bees. We literally need to plant more flowering trees, shrubs and perennials. Also plants that bloom into fall.
  - #3 City Codes: Some municipalities have restrictions on beekeeping within city limits. Several years ago in L.A. for example, you couldn't keep a hive anywhere in my city. Thanks to the efforts of a great organization called [HoneyLove.org](http://HoneyLove.org) that's changing community by community. Portland has these requirements; from the municipal code: [Facilities for keeping bees, such as beehives or apiaries, shall be at least 15 feet from any public walkway, street or road, or any public building, park or recreation area, or any residential dwelling. Any public walkway, street, or road or any public building, park or recreation area, or any residential dwelling, other than that occupied by the applicant, that is less than 150 feet from the applicant beehives or apiaries shall be protected by a six foot hedgerow, partition,

fence or similar enclosure around the beehive or apiary, installed on the applicant's property.] Bees are peaceful creatures with a lot of work to do. What they don't like is if you get in the way of them trying to do their jobs! They fly straight out from the hive 5-10' for the most part, before making bank turns for their destinations. Standing in the beeline can potentially upset them. Also, bees can feel threatened when the hive is being worked by a keeper, when they've lost a queen or are raising a new one, or are putting up honey for winter storage and the nectar flow begins to wane, which is at about the summer solstice. Hence the 15' rule. The PDX city code suggests planting a hedge, partition, or fence. What this does is it encourages bees to fly 'up' instead of 'out' from the hive, that way they disappear into the sky on foraging flights. Also, when the hive is disturbed by the keeper the bees are less likely to see and target a moving object. Swarming (natural formation of a new colony) is also a potential issue for neighbors or passersby. A cloud of 40,000 or so bees will leave a hive following a queen in a giant 60' diameter deliciously scented buzzing cloud and they'll land not too far from the hive forming a cluster, the spot from which they'll scout a new home [Recommended reading: [Honeybee Democracy](#) by Thomas Seeley]. Bees at this stage are most vulnerable to human fear of stinging and are often destroyed with pesticide spray. In actuality, this is the time bees are least likely to sting.

- *What is your advice for people who are afraid to beehive or just beginning?*
  - If you are afraid to keep bees or don't have the time or space, the best way to help the bees is to buy organic food, shop local farmers' markets, care for your landscape organically or hire someone who can, sign petitions, get politically active and become a bee advocate! If you're interested in becoming a beekeeper then read as many books as possible, take a class, join a local beekeeping group or talk with a beekeeper. There are a lot of websites, forums, blogs, how-to videos and Facebook pages dedicated to bees that are great resources!
  
- *How do you keep a successful hive?*
  - It's important to understand that we're standing on the shoulders of tiny giants here, that the bees are the one who came before us. Bees are responsible for the proliferation of flowering plants on the planet on which we rely for fruits, vegetables and nuts. They have woven the very fabric of life that makes our existence here possible. I do not keep them, they keep me. I do my best to not harm them, and what that means to me is caring for the land organically, providing lots of clean forage and water. You'll hear people talk about one hive type being better than another, one beekeeping technique being better than the other, but this misses the fact that bees are very skilled and successful at

adaptation, at keeping themselves and have millions of years on the planet to prove that. I believe that if the land is kept well, the bees will be well. Ask any now-retiring commercial beekeeper, getting out of the biz because their historically thriving and reproducing hives started dying off about 12 years ago, the same time when neonicotinoid pesticides came into widespread use, first on agriculture land and then for home gardens. In short, at this point, a successful hive is one that makes it through one year. :(

- *Do you grow any specific kinds of plants for your bees? If so what plants?*
  - Absolutely, too many to mention, but I'll try: Bees love trees! Trees provide large quantities of nectar, pollen and resins. Natives off the top of my head are Poplars (which they gather propolis to seal the hive with), Willow, Hazelnut, Alder, Serviceberry, Fir and they absolutely love Elderberry. You'll find an Elderberry in almost every garden I've designed. Hawthorns and Crabapples are popular. All fruit trees too, of course. As far as native shrubs go, I'd have to say Snowberry is the bees' fave and it blooms twice! Top of the list for near and non-native shrubs would be Ceanothus and Caryopteris. As for perennials, Asters, Agastaches, Echinacea, hardy Geranium, mints of all kinds. All Mediterranean herbs like Rosemary, Lavender, Thyme. Self-seeders such as Calendula, Clover, Borage, Nasturtiums and Sunflowers. Sunflowers are probably the best and easiest thing to grow for a multitude of native bees and other pollinators. Just when I think bees don't visit certain plants, I find out otherwise. Keep your eyes peeled!
  
- *Do you grow any food plants?*
  - Bees love vegetables, particularly squashes and pumpkin blossoms. Potatoes, peppers, peas, beans. I let carrots, beets, fennel, kale, lettuces and radishes flower and the bees like to help them set seed!
  
- *What are your ideas for how to handle colony collapse?*
  - I and many of my colleagues around the world think the term Colony Collapse Disorder is purposely misleading. We really do know what's ailing the bees, a class of pesticides called neonicotinoids that came on the market about 12 years ago for agriculture use and later for homeowner use. They are a nerve agent and systemic pesticide that is applied to plants either by spraying or coating the seed. The plant takes up the pesticide and expresses it in the pollen and nectar of the plant. When the bees feed on it they either become disoriented and don't make it back to the hive or they do and end up feeding it to their babies, weakening the immune system of the colony and eventually killing it. The problem is this stuff is ubiquitous, persists in the soil for years and is transported in water. It's killing off

soil biota, insect and bird populations. We need to work to ban these pesticides, like the City of Eugene, OR and many other communities did in 2014 and develop alternatives to pesticides. Short answer, Healthy Land = Healthy Hives. We need to put our hands in the soil, become gardeners, maintainers of life instead of takers. No shortage of work to be done!

Here are some links regarding the neonicotinoid issue:

- <https://www.facebook.com/theneonicotinoidview>
  - <http://www.bouldercountybeekeepers.org/toms-corner/>
  - <http://www.pesticide.org/>
  - <http://melissabees.com/city-of-eugene-receives-melissa-bee-good-award/>
- *Do you think urban beekeeping will help prevent Colony Collapse?*
    - It will in the sense that bees help people connect with the earth's time and timing, each hive being a locus for health, and hopefully that will translate into much needed reform in the areas of food production and land care. At this point, I do think that urban beekeepers on the whole tend to get caught up in which one has the better hive, or technique and miss the big picture of the state of our lands. As someone who keeps bees in four hive types, Langstroth, Top-Bar, Japanese and Log and experiences the same percentage of losses in each type - I hope that we can keep our focus on the issues that affect the bees most. 'She Who Watches' working log hive with happy friends in my garden!