

Zoning, Gardens and Honey Bees

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Some local governments are now contemplating whether Honey Bees are pests or beneficial insects. One township is contemplating restricting Beekeeping to large lots of 30,000 sq.ft. This is a result of a resident who expressed fear about a backyard hobbyist beekeeper that lived in her neighborhood, and who considers them a pest. But the provisions of this zoning ordinance will affect other residents in the municipality.

Are Honey Bees really dangerous? How are they different from Yellow Jackets and Wasps? What size lot is safe to have honey bees on? Why are people so fascinated with Honey Bees that they want to keep them in their back yard? What about their kids, are they safe?

Beekeepers are quiet normal people. They are our neighbors who have an interest in protecting the environment, and enjoy sharing their fascination of nature with their kids. Honey Bees can be safely kept on small lots in Philadelphia and New York City, so why not suburbia? It is very rare for municipalities to experience problem from honey bees, so why the interest in restricting them Now? The Inquirer Article!

To many people, bees are anything that sting. They do not know that Honey Bees are different from Yellow Jackets and wasps. When someone is stung at a picnic, they develop a fear of bees. But Honey bees are vegetarians; they aren't interested in your food, just your flowers. Also, **Honey Bees die when they sting so they are genetically pre-disposed to only sting as a matter of last resort.** Honey bees do not live in the ground; Digger Bees live in the ground. In fact, Honey bees are gentle enough to keep in backyard hives. What we need is some basic Bee Education.

Fortunately for those of you that enjoy gardening & wish to eat local home-grown pesticide-free foods, reason & science usually outweighed fear & anxiety.

But you must be an advocate for Honey Bees. If you want to protect your local beekeeper and ensure your garden of a bountiful harvest, or to buy local honey at a local farm stand or farmer's market, you must speak up.

When I see a honey bee on a flower, I know there is a beekeeper nearby. Beekeepers are adapt at making their hives inconspicuous, because they understand that the public has a fear of Bees. But if Honey Bees are outlawed in your neighborhood (or not allowed in your zoning district), this will have a direct impact on your flower gardens, home grown vegetables, berry bushes, fruit trees, and bird population (who depend on seeds from flower heads that are pollinated by Honey Bees).

Limit Beekeeping to large lots does not make sense. It is no less safe to have a bee hive on a 20' lot, as an acre lot, since a bee hive takes up little space. It is not like having 10 dogs on a 20' lot (which might be a little

crowded). Bees do not stay in the yard, instead they fly 1' to 10' out from the hive, zoom up to the tree tops and travel up to 2-3 miles in search of nectar and pollen, covering potentially 12,000 acres. Whether you live in a neighborhood that has 2,000 sq.ft. lots or 1 acre, you should be able to have gardens and enjoy fresh fruit & vegetables, many of which can not be adequately pollinated without Honey Bees. Small lot owners should have the same rights as large land owners.

Lot size doesn't affect the bees, but it does affect you. If no one in your zoning district can keep bees, then will you have enough bees to pollinate your gardens, your flowers, or your fruit trees? Don't you deserve the same rights as large land owners? Why should large land owners be the only ones to be allowed to keep Honey Bee hives? Why should their neighborhoods be the only ones to have a neighborhood beekeeper?

Even myself, before I was educated to the plight of Honey Bees (five years ago), I was scared of bees. As a kid I cut lawns, and was stung by yellow jackets on numerous occasions. I didn't understand the difference between Honey Bees, Yellow Jackets and Wasps. Now that I have seen Honey Bees and handled them, I find them sweet, gentle, stinging only when you disturb their hive or crush them. They are not like yellow jackets or wasps, which will sting you multiple times.

Would you sit in a car with a box of Honey Bees on your lap?

You would if you knew it was safe !

This is a picture of a Beekeeper who has just captured a swarm of Honey Bees.



Although a yellow jacket may be a pest, her cousin the Honey Bee is not. My wife and I often spend time in the summer taking the roof off our hives and watching our Honey Bees (in T-shirts and shorts, without veils), because they are not dangerous, and are so fascinating. We have 3-6 hives, and generally lose 50-60% of our hives over the winter. We split the hives in the summer, so we can end up with at least two hives for the spring pollination of our garden and our neighbor's apple tree, and the nectar flow. Since the Queen starts laying eggs in early January, we need 2-3 strong hives in March when they start foraging for pollen and nectar. I am now learning how to raise my own queens in NUC boxes, (miniature bee boxes). What fun !

I can't imagine that there is anyone, who has not heard the alarms surrounding the disappearance of Honey Bees. PA has 50% fewer colonies than it did in 1983. School children are urging their parents to "help the honey bees" <http://www.helpthehoneybees.com/> Supporters of the Honey Bees including local gardening clubs, and environmental groups. This is because most people understand that Honey Bees are beneficial insects and not pests. **Otherwise, who would care?**

Honey Bees differ from Yellow Jackets and Wasps, just as a Seeing-Eye Dog differs from a Wolf. Same species, but entirely different in temperament.

Who else thinks Honey Bees are beneficial insects?

Honey Bees are on roof tops in Paris, in Philadelphia, in small boroughs like Jenkintown and Ambler. Even the White House has Honey Bee hives. New York City overturned its ban on beekeeping, because of their increased awareness of the importance of Honey Bees <http://cityroom.blogs.nytimes.com/2010/03/16/bring-on-the-bees/>

The State of PA (and the U.S. Government) consider Honey Bees to be beneficial insects, critical to our state's and nation's agriculture. Hundreds of thousands of dollars are being spent in Pennsylvania (at Penn State) and at other Universities, researching the causes of CCD (Colony Collapse Disorder). These funds are earmarked to help the Honey Bee because it is such a beneficial insect. Otherwise who would care.

There are **no** experts that consider the Honey Bee to be a pest to be eradicated.

Honey Bees are critical to local community gardens and fruit trees. Local Garden clubs realize that, without the Honey Bee, many flowers will not be pollinated, and the diversity of our flowers and vegetables would diminish. My neighbor, who was initially concerned about my hives, now recounts what a wonderful bounty his apple tree produces, now that I have hives. He has never complained about bees congregating on his property, nor do they on mine.

90 flowering crops are pollinated by Honey Bees. A number of crops are almost totally (90%-100%) dependent on honey bee pollination, including apples, blueberries, cherries, broccoli, carrots, cauliflower, celery, cucumbers, onions, pumpkins, squash, and more. There are many other crops that rely on adequate pollination by honey bees because of their dependable nature, such as peaches, pears, nectarines, plums, grapes, brambleberries, strawberries, cantaloupe, watermelon, honeydew, and sugar beets.

Many members of the public are not aware how important honey Bees are, plus they are fearful of being stung. If only we could educate them as to how un-dangerous Honey Bees are!

Four years ago, I too, was unaware and fearful of Honey Bees. But now that I understand that I will not

be stung unless I crush them or disturb their hive, I have learned to love and appreciate them. I also know that if I use a smoker, I can even disturb their hives and not get stung. I often do so without a veil or any protective clothing (in a T-shirt and shorts). Now that I have had Honey Bees land on my arm, and watched them lick salt from my arm, I am not fearful. I have even had a local cub-scout troop come to look at my hives. The kids were fascinated and not fearful.

Parents want to protect their kids. We understand that. If parents could see pictures of a beekeeper and their kids, at their hive, pulling a frame in their normal summer garb, then they will understand how docile Honey Bees are.

Picture of experienced Beekeepers in their normal summer garb (no bee suits or veils).

Beekeepers know that we have nothing to fear from Honey Bees.



If people could see pictures of hives on small lots in local boroughs and in cities, where the lots are 20' wide, they would understand that you don't need to have 1 acre lots. Honey Bees leave the hive, flying out 1' to 10' and then zoom up to the tree line, flying over the neighborhood and up to 2-3 miles to get nectar & pollen. I am amazed with 7 hives, how few bees I see in my yard; and my neighbors have never complained about my bees congregating in their yards.

Maintaining a healthy diverse population of Honey Bees in our neighborhoods is important not only for their survival, but also for their genetic diversity as a species. There are many more Beekeepers in our communities than the public knows about, because beekeepers understand the unfounded fear and reaction that many people have concerning bees. For that reason hives are placed in inconspicuous places.

Honey Bee Hives are at Longwood Garden, in the very public accessible Tree House, where the bee entrance is directed away from the tree house, but bees fly everywhere. They are on school roofs in NYC, they are in community gardens in Philadelphia. They are at the Plymouth Meeting Friends School. They are on tiny lots in Phila and on house and garage roofs.

Whether you live in a neighborhood that has 2,000 square foot lots or 1 acre lots, you should be able to have gardens and enjoy fresh fruit and vegetables, many of which can not be adequately pollinated without Honey Bees. Small lot owners should have the same rights as large land owners.

Anne Javsic, head of Plymouth Meeting Friends School, tells about having hives on the school grounds, and the problems they faced with stings from

yellow jackets, which were attracted to kids eating lunch outside; yet not one sting from a Honey Bee. Asked how she knew if the stings were from yellow jackets and not Honey Bees, she explained that Honey Bees sting only once and leave the stinger in the skin

In a recent poll conducted by the Philadelphia Inquirer which asked “Would you be comfortable if your neighbors were beekeepers and the bees would potentially be around your property?”

387 (73.4%) said yes; and 140 (26.6%) said No.

One sign that there is at least one healthy colony of Honey Bees in your neighborhood is a “swarm”. This is a natural occurrence, where a lot of honey bees land on a branch, clustering together, until scout bees can find a new home, usually in the hollow of a tree. The sight of a swarm can be alarming, but is actually a very safe time, as the bees are homeless and have no home to protect. Most neighbors call 911, and the police call a local beekeeper, who shows up to collect the swarm. There are pictures on the internet of Beekeepers with no protective clothing, clipping the branch the bees hang on, putting them in a box, and taking them home to a new hive. I have even done this at a local church, and invited the Nursery School kids to come out and watch. There was no danger to the kids. They watched from 20’ away. A nature lesson they will never forget! <http://www.youtube.com/watch?v=NXEyxA2WpM>

[Swarm capture at Upper Dublin Lutheran Church.](#) There is no danger to nursery school kids watching from 20’ away. A nature lesson the kids will never forget !



1. Did you know that Honey Bees are strict vegetarians, eating only plant products (pollen and nectar), and never land on meat.
2. Did you know that Yellow Jackets are carnivorous wasps, and are a nuisance at picnics where they gather meat?
3. Did you know that 15% to 30% of the Honey Bees you see flying are collecting pollen, (varying from 50-300 flowers per load, and making 1-50 trips a day to do so)?
4. Did you know that the other flying Honey Bees are collecting nectar (100-1500 flowers per load), and making 1-29 trips per day? Their Trips last from 5-15 minutes.

That is a lot of pollination!

Some people claim to be allergic to Honey bees based a previous stinging event that resulted in pain and swelling. However these stings often come from

other insects and NOT from honey bees. While life threatening reactions to stings are possible and should not be taken lightly, most people who claim to be allergic are actually just experiencing their body's normal reaction to the venom from a wasp or bee sting -- local swelling and heat. The swelling can be dramatic, but studies have shown that 75-80% of bee stings come from other bees, not honey bees.

Did you know that you can get tested? Your local allergist can arrange for testing to confirm not only whether you are allergic but also which species you might have allergies to. The scratch tests are administered much like environmental allergen scratch tests where the venoms of a wide variety of stinging insects can be tested to judge the reaction strength. If you are found to have a high sensitivity, you can get allergy shots that will help to boost your immune system and prevent the undesired response upon encountering a sting. More importantly the allergist will help you put in perspective what kind of insect you might be sensitive too, so that you don't blame the beneficial insects that are all around us.

Zoning Issues- In PA, Beekeepers have a Bee Law (PA ST T. 3 Pa.C.S.A., Pt. IV, Ch. 21,) and are governed by the [PA Beekeeper Compliance Agreement](#) from the PA Dept of Agriculture, which already addresses issues of setbacks, hive locations, etc. Zoning restrictions on Beekeeping are sometimes proposed as

a result of a complaint from a neighbor. **Zoning is commonly referred to as a “police power” that was designed to protect the Health, Safety and Welfare of the public.** The passing of restrictions in a zoning ordinance is often an over-reaction, particularly when you consider how crucial honey bees are to our local neighborhoods. If you find yourself in need to oppose such a proposed restrictive zoning ordinance, prepare a presentation to dispel fear and educate the elected township officials, and a careful section by section rebuttal of why each proposed restriction does not increase the public health, safety, or welfare. Presenting information to the County Planning Agency, the Township Planning Commission and the Township elected officials can often overcome the fear that instigated the proposed ordinance, but not always. Be sure to point out each section of the

proposed ordinance which exceeds the Compliance Agreement, and point out that if these sections are not based on apiary science, then they are an excessive, arbitrary and capricious regulation on the property rights of a land owner. Restrictive Beekeeping Ordinances affects not only the beekeeper, but also their entire neighborhood, who benefits from their hobby. A restrictive Beekeeping Ordinance will not increase the protection of the health, safety and welfare of the public, **but do the reverse!** Property owners, who enjoy having gardens, fruit trees, and berry bushes, need bees to pollinate many of them. Property owners, who for health reasons want to have chemical free food for their families will be affected by such an ordinance. Families, who for safety reasons, want to be self sufficient, will be negatively impacted. In these tough economic times, the public's welfare is diminished by any ordinance that restricts the ability of neighborhoods to raise their own organic chemical free food, and save money by doing so.

If a restrictive beekeeping ordinance seeks to limit the number of hives on a lot, it should be pointed out that density should not be an issue. It is not like having 10 dogs on a 20' lot. Bees leave the hive, fly up and spread out over the entire neighborhood; gathering pollen and nectar. Apiary science suggests that Zoning should allow for 6 hives on any lot ½ acre or less. The reason is that Backyard beekeepers need 2-3 hives so they can track and compare one colony's health with others as they progress through the Beekeeping year. Backyard Beekeepers commonly loose 50% or more of their hives in the winter, so they need at least 4 hives going into the winter. To manage hives, they need to split them to control swarming, which is a natural occurrence, so 2-3 hives easily become 4-5 in the Spring and Summer. In addition, police often call local beekeepers to retrieve swarms that happen in the municipality. The Beekeeper needs another box or two for raising queens or capturing these swarms. If the local beekeeper is splitting hives, raising queens, and is maxed out on their hives, the township may have to hire someone from a distance to come get the swarm. **Some hives are weak, some are strong, and some are starter colonies.**

I currently have 8 hives on my 30,000 square foot lot, one is empty, but is prepared to capture a swarm. My hives occupy a space of 2' x 14'. A small lot owner having 6 hives, could have a similar configuration. Whether they have 2 strong hives or 6 hives (that vary in strength), the reality is that bee density on their property and those of their neighbors will not be a problem. The reality is not all hives are full of honey bees, and since only 10-15% of the bees in a hive, leave the hive to forage for nectar and pollen, most of the bees are inside the hives tending to the hive itself.

I am surprised at how few bees I see in my garden. Yet I know they must be visiting it because I have a wonderful bountiful garden.

To conclude- Honey Bees are beneficial to local community gardens and fruit trees, and pose little risk to the health, safety and welfare of the public. They are not aggressive like yellow jackets and wasps and are not a pest. Honey Bees are kept in managed hives and are not a random unwanted infestation.

Honey Bees from backyard beekeepers pollinate most of our backyard gardens. Native pollinators are also important, but because we enjoy so many vegetables that are not native to the US, we rely on honey bees for dependable pollination. Bees also pollinate flowers that provide seed and food for birds.

Hobbyist beekeepers on small lots should not be discriminated against. They have as much right as large landowners to ensure adequate pollination of their gardens. So too do other Gardeners and Bird lovers who live in their neighborhoods.

There are constant news articles about the national threat to our food supply, due to Bee colony losses. But having local beekeepers is just as important to local vegetable gardeners, as having water & compost. In addition, local Backyard Beekeepers are an insurance policy against devastating losses by large commercial Beekeepers, and provide unique opportunities to maintain and ensure genetic diversity. Commercial Beekeepers have lost up to 90% of their hives in the past. If that were to continue and spread, we would all be growing gardens in our front yards. But where would we get our bees from? If we have local beekeepers, dispersed through our communities, we would be more likely to have the genetic diversity we need to resist such losses and be able to recover. A restrictive zoning ordinance negatively impacts on our current and future health, safety and welfare.

The public is not aware of how many local beekeepers there are in their neighborhoods, because Backyard Beekeepers are good at shielding the hives from public view. Any time I see a Honeybee, I know there is a hobbyist beekeeper near by.

There are many residents whose first reaction on learning of a neighboring beehive is fear. Outlawing Beekeeping in your neighborhood because of that unfounded fear, would negatively impact the health and enjoyment of other residents who are gardeners.

Nature abhors a vacuum. If there are no Honey Bees, then other more aggressive species may fill that void.

Honey Bees are commonly blamed for all bee stings, when 75% of the time it is a yellow jacket, wasp or hornet. Even some Beekeepers are allergic to honey bee stings, but they learn to deal with it.

Many Americans have wonderful **organic** vegetable gardens, great wildflower gardens, and **chemical-free** fruit trees that yield bountiful harvests. Honey bees are a critical component for pollination of these, and their absence will affect food safety for those who grow their own food in tough economic times. Restrictive Zoning Ordinances will negatively affect the health, safety and welfare of the public.

Consumers seek out local honey because it is **healthy**, and imparts medicinal allergy fighting therapies for those who suffer from seasonal allergies.

Zoning Ordinances that affect beekeepers should be based on Apiary Science, not fear and anxiety.

Minimum lot sizes are arbitrary, capricious and contrary to the public good. Lot setbacks should not exceed those developed by the Department of Agriculture as they might adversely affect hive placement considerations and thus Bee health and fuel viruses. This is important for Beekeepers.

Zoning is supposed to protect the health, safety and welfare of neighborhoods. Restrictions against Beekeeping do just the reverse, they inflict harm by imposing restrictions on neighborhoods from raising and adequately pollinating **chemical-free healthy** organic home-grown food. They inflict harm to neighbors who need to grow their own food in tough economic times thus impacting their **economic safety** and **welfare**.

It makes no sense to restrict beekeeping, except out of fear, which you now know is ill placed regarding Honey Bees. **Preserving local backyard Beekeeping is vital to the health, safety and welfare of us all !**

Montgomery County Beekeepers Association is currently opposing a restrictive beekeeping ordinance in Plymouth Township, Montgomery County, PA. Go to www.SaveOurGardens.org to learn more.

Lets share the wonder of nature with our children. Support your local Beekeeper.



Recent News Stories:

6/12/2012 NPR (National Public Radio) Radio Times, [Philadelphia], <http://why.org/cms/radiotimes/2012/06/12/the-buzz-on-beekeeping-as-a-hobby/>

Sources of Additional Information:

1. Do you have Nature Deficit Disorder (NDD)?

Dennis vanEngelsdorp (the Acting State Apiarist for the PA Department of Agriculture) thinks that we might... and that it may be contributing to CCD.... "Make Meadows Not Lawns" is one of his quotes, and it would make a great bumper sticker. He remarks that 11% of all pesticide use in the US goes to maintaining our lawns, which are sterile fields as far as the bees are concerned -- no pollen sources in evidence!

See his youtube video at **The Taste3 conferences:**

[2007 video- The Joy of Bees](#)

[2008 video-Where Have the Bees Gone](#)

2. YouTube video showing swarm retrieval at Church with nursery school kids safely observing from 20' away <http://www.youtube.com/watch?v=NXEYxaA2WpM>
A nature lesson the kids will never forget !

3. **Websites:** <http://www.helpthehoneybees.com/>
<https://agdev.anr.udel.edu/maarec/>
<http://ento.psu.edu/extension/bees>
<http://www.pastatebeekeepers.org/>
<http://www.montcobeekkeepers.org/Pages/default.aspx>

4. **Movies**, on the importance of Bees: [Vanishing of the Bees \(Move Trailer\)](#) and [Pollen Nation \(Movie Trailer\)](#)

5. Animal Planet's "**Overcoming One's Fear of Bees**" shows you can feed honey bees in the palm of your hand. <http://animal.discovery.com/videos/my-extreme-animal-phobia-man-scared-of-bees.html>

6. **News Articles:**

- CNN, "**Disappearing Bees Threaten Ice Cream Sellers**"
http://money.cnn.com/2008/02/17/news/companies/bees_icecream/
- National Geographic, "**Bee decline May Spell End of Some Fruits, Vegetables**"
http://news.nationalgeographic.com/news/2004/10/1005_041005_honeybees_2.html
- FOX NEWS, "**Following Honeybee Disappearance, Bumblebees Begin Vanishing Act**"
<http://www.foxnews.com/story/0,2933,299982,00.html>
- NPR (National Public Radio)
"**Bee Deaths, Loss of Navigation Cause Concern**"
<http://www.npr.org/templates/story/story.php?storyId=9972616>
- IANR (Institute of Agriculture and Natural Resources), University of Nebraska
"**Help Disappearing Bees by being Sustainable, Having Diverse Resources**"
<http://ianrnews.unl.edu/static/0807301.shtml>
- New York Times
"**Honeybees Vanish, and Scientists Race for Reasons**"
<http://www.nytimes.com/2007/04/24/science/24bees.html?pagewanted=all>
- 60 Minutes "**What's Wrong With The Honeybees??"**
<http://www.cbsnews.com/stories/2007/10/25/60minutes/main3407762.shtml>
- BBC "**Disappearing Bees Puzzle Experts**"
http://news.bbc.co.uk/2/hi/uk_news/england/somerset/6587069.stm
- The Independent (Britain) "**Why are honey bees disappearing, and What can Save Them??"**
<http://www.independent.co.uk/environment/nature/the-big-question-why-are-honey-bees-disappearing-and-what-can-be-done-to-save-them-813971.html>