

10 Most Frequently Asked Questions about Honey Bees

1. I have got honey bees nesting in the walls (soffit / eave / subfloor / bay window / chimney) of my house. How do I:

a. Get someone to take these free honey bees and honey? After all, honey bees are endangered, and beekeepers should want them?

Answer: There are several parts to this question. First, honey bees are not disappearing from the planet. Certainly, commercial beekeepers have had some high mortality rates in some years, but honey bees as a species (*Apis mellifera* L.) are doing quite well globally.

Second, a homeowner is not doing most beekeepers a favor by providing them access to the bees in a building or structure. There are much easier ways for beekeepers to get honey bees. Your situation is a real job that may require several hours of work to remove the bees and return the structure to a functional condition. This is work, and homeowners should be willing to pay for the job.

Third, most beekeepers do not have liability insurance. Therefore, many are reluctant to attempt taking apart a structure to remove bees for fear of causing damage to your home or building for which they cannot afford to repair.

b. Get someone to kill the bees when pest control operators (PCOs) tell me that it is illegal to kill them?

Answer: Some PCOs will tell you that it is illegal to kill honey bees. This simply is not true. Honey bees can be a nuisance, and in some situations, killing them is the best option. This is especially true if the bees are stinging family members or pets or neighbors.

c. Kill the bees myself?

Answer: The extensive answer can be found in the publication entitled “Nuisance Honey Bees” under our Publications header. This is an informative issue of the *Bugwise* newsletter that was written by Dr. Blake Layton of our entomology department before I joined. Bees can be easily killed with dusts, soap and water (1 cup of liquid dish detergent per gallon water; sprayed with a pressure wand), and various other insecticides. *Only use insecticides that are legally registered for use with honey bees and always strictly follow the instructions.*

The problem is not so much in killing them – the real problem involves the fate of the unprotected combs and honey after the bees are dead. If these materials are not removed from the walls, moths, beetles and ants can begin eating the combs, which causes the honey to run down the walls and onto your floor. If insecticides are used to kill the bees, the honey should not be eaten by anyone (nor should it be fed to other bees or animals).

d. Keep bees from re-entering the cavity after the bees have been killed?

Answer: The best way to keep future swarms of bees from entering the structure is to remove all combs and residues in the cavity before restoring the structure to its original state. Combs and odors in the cavity will be attractive to swarms of bees for years, and if not removed, another swarm is likely to move into the cavity. Additionally, once the structure has been cleaned and returned to functionality, make sure that the entrance to the cavity has been eliminated or sealed. Honey bees only need an opening of 1/8th inch to get into the cavity behind a wall or structural facade.

2. I have a swarm of bees hanging on a tree or bush in my yard. What should I do to protect my family?

Answer: Generally, you should do nothing! A swarm of bees is a group of bees that are temporarily resting in your yard while they look for a new cavity in which to live. Usually, swarms are most frequent in the spring (April and May). A swarm is a soccer ball-sized mass of bees hanging on a limb. They are not prone to sting unless disturbed by physical molestation (e.g. kids throwing rocks and hitting the swarm). Most swarms will leave within 1-3 days of first landing. However, inclement weather can delay a swarm's departure.

Technically, a swarm of bees is a mass of workers (some drones or male bees) and a single queen without combs or baby bees (larvae or pupae). Honey bees sting to protect their nests, which contain their food (honey and pollen) and the baby bees. Swarms do not have these items to protect. However, sometimes swarms will begin to make combs on limbs on which they are hanging. This usually occurs when a swarm cannot move to a new home within a few days of the initial landing (inclement weather). Once combs are built, the group is no longer a swarm. Instead, they are now an established colony of bees that will be much more prone to sting.

Luckily, most beekeepers are very willing to retrieve swarms and/or the established colonies of bees that have combs exposed on limbs (assuming that they are not too high in the tree). Most beekeepers do not want to work more than 15 feet off the ground. Please see our list of the "Local Bee Clubs in Mississippi" in the Publications heading to locate beekeepers in your area that might come to retrieve a swarm from your yard.

3. How do I eliminate honey bees from my hummingbird feeders?

Answer: Some commercial feeders have bee guards that prevent the tongues of honey bees from reaching the sugar syrup in the feeder. These grids allow the hummingbirds to insert their longer bills into the artificial flowers to reach the food. So, the best way is to use these types of feeders to keep bees from ever getting to the food. Once bees have found a vulnerable feeder (one without a guard), they will take advantage and show up by the hundreds to thousands. They will drain the feeders and compete with the birds for the food.

4. Honey bees are coming to my swimming pool or water bath. How do I get rid of them?

Answer: There is no easy solution. Honey bees like to go to water sources close to their hive location. They use the water to cool the nest, and of course, they drink water for physiological needs. Sometimes a beekeeper may have hives nearby, and if he or she has not provided the bees an adequate water supply, the bees visit your pool or pond or water bath for water.

The best solution is for the beekeeper to provide a fresh water source closer to the bees than your sources. If the beekeeper is a good citizen, he or she should be more than willing to alleviate your nuisance bee problem by providing a closer water supply.

One point to emphasize is that sometimes it takes a few days or a week or so for the bees to be trained to the closer water source – so be patient during the transition period. If the bees will not stop using your pool or water bath, the best solution may be for the beekeeper to move the bees to another location several miles away.

5. How do I start a colony of honey bees?

Answer: The easiest methods are to install either (1) a package or a (2) nuc of bees into your standard 10-framed hive equipment. A package is 3.5 lbs. of adult worker bees and a caged queen shipped to you within a larger cage. A nuc is a nucleus or small colony that consists of 5 combs of bees with an already well-established and egg-laying queen. Most often a nuc has combs filled with honey, pollen and at least 1-2 combs with capped and uncapped worker brood.

Whichever method you use, timing is very important. Bee colonies should be started in the spring (March, April or up to mid-May) to give the young colony time to grow and become established before the summer dearth. Most colonies will be started with frames of foundation rather than fully drawn combs for new beekeepers, and it takes lots of honey to secrete wax necessary for building combs on the foundation. Bees probably utilize >25 lbs. honey to make 10 medium-sized combs. Therefore, comb construction can only occur during heavy honey flows or when the bees are fed additional syrup during a honey flow.

Starting with package bees: The queen is shipped inside a queen cage that hangs within the larger cage of worker bees. Usually, the queen cage will have 5-8 worker attendants with the queen. Remove the attendant workers because they could die in the queen cage before the queen is released. Then position the queen cage in the center of the hive body that will receive the new colony. The cage should be anchored or tethered to the center frame so that it does not fall to the hive floor. The queen should hang several inches below the top bars of the combs so that she can be surrounded by bees in the center of the cluster.

Next, lightly spray the worker bees with sugar syrup before gently dumping them into the new hive body. The bees will fall into the hive and begin to re-organize within minutes. Some of the bees may be reluctant to leave the shipping cage, so just leave it on the ground near the hive entrance so that the workers can eventually join their hive mates. The hive should be fitted with some kind of feeder and a full set of frames of foundation or combs. The bees will need to be fed continuously for at least 10 days, even if they are started with drawn combs. If they are

started with foundation, feeding may need to continue until a heavy honey flow begins to help stimulate comb construction.

If you choose to allow a self-release of the queen, pull the cork plug from the end of the cage that contains the candy. This will allow the bees to eat the candy, which should release the queen in a couple of days. You may want to hand release the queen as a way to protect her from being attacked or balled by the bees. To do that, simply leave the cork to protect the candy from being eaten by the bees. Hang the queen cage in the cluster for 2 days before manually releasing her from the cage. Gently remove a staple from the cage mesh and allow the queen to walk onto a frame of comb or foundation. If she is attacked by workers, catch her and place her back into the cage for another couple of days before trying the release again. If the workers lick and/or lightly touch her with their antennae and begin feeding her, she will likely not be harmed. You will need to check the hive again within a few days to make sure that the queen is laying eggs and producing brood. Many people also feed a new hive some kind of protein supplement to help encourage brood rearing.

Starting with a nuc: This method is much easier than starting with a package because you begin with already drawn combs that have all stages of brood and an already accepted and laying queen. Simply remove the combs from the nuc and place them into the center of the new hive body in the same order that they occurred within the nuc. Then add a feeder and combs or frames of foundation to completely fill the 10-frame hive body. Feed the colony syrup to help draw out foundation and/or to provide it food to begin storing in the combs. You then add new hive bodies as the colony grows (which is “beekeeping as usual”). Although somewhat easier than starting with packages, you will probably begin with older combs that could harbor pathogens (spores of American foulbrood bacteria or *Nosema*) or agricultural chemicals or miticides used against Varroa mites contaminating the beeswax.

6. Where can I buy queens and package bees or nucs in Mississippi?

Answer: The Bureau of Plant Industry (Mississippi Department of Agriculture) maintains a list of beekeepers that certified to sell queens and package bees. The list can be found under the Publications heading of our website. You should consider ordering your bees during the autumn or winter prior to the spring in which you want the bees. If you wait until March to order bees that you want in April or May, you will not likely get any bees. You are more likely to receive bees from most suppliers if you are on a waiting list from the previous fall.

7. Where can I find other beekeepers near where I live in Mississippi?

Answer: We have posted a list of the local beekeeping clubs in Mississippi. The list will be update periodically to reflect changes in the names of the contact people as new Presidents are elected in each club. The clubs listed in bold text are formally part of the larger state beekeeping group, the Mississippi Beekeepers Association (MBA). Those listed near the end of the list are groups of beekeepers that periodically meet, but their group is not yet a voting member of the MBA.

8. Are there killer bees established in Mississippi?

Answer: No. The migrating front of Africanized honey bees (AHB) that entered the U.S. through the tip of Texas has expanded westward into New Mexico, Arizona and California and north-eastward into Oklahoma, Arkansas and Louisiana. No one knows why, but the movement of this migrating front of AHB has been much slower than was predicted in the 1980s. Currently, the bees are just over 100 miles west of Baton Rouge, but the density of these bees is much lower in Louisiana than in dryer portions of the western states. AHB are also thoroughly established in Florida, especially around Miami and Tampa. The Florida population almost surely began from swarms that issued from cargo ships at the many ports on the coast.

Although a few swarms of AHB have been intercepted at Mississippi ports, there is no evidence of an established population of these bees along the coastal counties. The last intercepted swarm occurred in October 2012 near Pass Christian, MS. Subsequent monitoring of swarms in that area has resulted in no further interceptions of AHB. All subsequent swarms have tested to be of European honey bee origin.

9. What are some good sources for reading about beekeeping?

Answer: The *American Bee Journal* and *Bee Culture* are two U.S. magazines about beekeeping which are published on a monthly basis. Both journals offer regular feature columns and specialty articles about all aspects of beekeeping. They are great additions to any beekeepers library.

There are different types of books on the subject. Some books are extensive compilations with multiple chapters written by experts on various aspects of beekeeping or bee biology. Generally, these are not the type of book that one would read cover to cover. Instead, they are more like encyclopedias in which one might look up a specific topic from time to time. I include *The Hive and the Honey Bee* and the *ABCs and XYZs of Beekeeping* in this group of books.

There are many books written about beekeeping for beginners. They are designed to be read from cover to cover. These include: (1) *Storey's Guide to Keeping Honey Bees*; Sanford and Bonney, (2) *The Beekeeper's Handbook*; Sammataro and Avitable, (3) *The Backyard Beekeeper*, 3rd Edition; Flottum, and (4) *Top-Bar Hive Beekeeping*; Mangum.

10. I have a colony of honey bees that sting too much. What can I do?

Answer: There is no reason to tolerate honey bees that are too defensive. However, a word of caution about evaluating the true character of a colony of bees based on a single event. Sometimes colonies are more defensive after they have been molested by predators like skunks during the night. Sometimes robbing events can make bees defensive. The key is whether or not a colony is defensive every time you visit them. Chronic defensive behavior (or at least a series of bad stinging events) may suggest a genetic component to the behavior. The best way to reverse such a problem is to re-queen the colony with a queen from a known gentle stock of bees.