

Montgomery County Beekeepers Association

Minutes for Monthly Meeting

05/19/2025

Apprentice Meeting 05/19/2025

Speakers: Doug Stanley

Started at 6:15pm

The biggest killer of queen bees is a beekeeper. When inspecting frames, you can 'roll' your queen, basically meaning you smash her. You can leave out a frame in your hive to prevent this. For example, in a 10 frame box, you leave 9 frames.

When your bees are hanging out of the front of your hive, you might think they're going to swarm. This is not always the case, especially in hot weather. This is how they cool off during the afternoons and evenings in the summer.

When you're inspecting a new hive, especially in spring and summer, you can observe what the bees are bringing into the hive. If they're bringing a steady supply of pollen, it means the pollen flow has started and you most likely have a queen. Pollen is what they feed their young bees, so if the queen isn't laying eggs, they wouldn't need pollen.

When bees are buzzing, it creates a static electricity charge. This means when they fly into a flower, the pollen will kind of track to the bees. Bees are also completely covered in little hairs, so this helps them collect pollen as well. Bees have a tiny hook on the back of their back legs, which is where they stick the pollen.

A bee's waggle dance all depends on the position of the sun. However, the time a bee takes to fly back to the hive and dance, the sun's position won't be the same. A bee can compensate for that in her dance.

If you are feeding your bees and they aren't eating it, it likely means that the nectar flow has started. Bees prefer natural nectar over sugar syrup, so they will not take sugar syrup during the nectar flow. Sometimes there will be so many bees on the front of a hive that are coming back from foraging, it will look like a swarm.

This time of year, people start putting supers on their hives. This is a (typically smaller) box that is specifically for bees to store honey in. Usually, if people are using honey supers, they will put a queen excluder below it. A queen excluder is a plastic or metal grate that people

use to keep their queens from laying in the honey super. It is just the right size that worker bees can pass through it, but queens can't. Metal queen excluders are recommended, since it's easier on the wings of a worker bee, and they're typically easier to take extra wax off of. However, it all comes down to personal preference.

If you're having trouble getting your bees to use plastic foundation frames, you can put extra wax on the frames. You can also spray the frames with sugar syrup, and feed the bees to stimulate wax production. To coat plastic foundation melt wax in a crock pot and use foam paint roller 4" or paint brush, pay attention to corners and edges.

It takes about 8-10 pounds of honey/sugar syrup to make a pound of wax. That's why it takes bees so long to build. It's also the reason that you get so much more honey the second year of beekeeping, since bees won't have to make as much wax. This is also why it is so important to save your waxed frames. You can freeze the frames to store them.

In the summer, people usually use ventilated screen bottom boards on their hives as opposed to solid ones, since this allows more airflow. It can also help a small bit with mites and small hive beetles, since once they drop down they can't just climb back up. It obviously won't help a whole lot, but combined with your other mite treatments and beetle traps it will help. Though in winter, you can slide a piece of cardboard or a tray into the screen bottom board, so cold air doesn't blow up under the hive.

Africanized bees are very mean bees because in Africa, everything wants to eat the honey and the brood. So they've learned. A big difference between our European bees and Africanized bees is that European bees are defensive, but once you're away from their hive, they stop. Africanized bees don't stop. Africanized bees also typically nest underground, so be careful around swarms in water meter boxes, etc. To get away from these bees, you go to your car or in a building and turn your AC on as cold as it can be, and as windy as it can be. They don't like the cold so they should just go to the nearest window.

Meeting concluded at 7:00pm

Main Meeting

Started at 7:0:4pm

Pledge of Allegiance

Speaker: Bill Boitim

Topic: African Honeybees, European honeybees, and the Africanized honeybee

Bees are in the insect order of Hymenoptera. This includes wasps and such. Their insect family is Apidae, genus of Apis, and honeybees are in the species Mellifera. There are about 20 subspecies of honeybees. Honeybees are from Europe and the Mediterranean. Geographic isolation is the result of these 20+ races of the honeybee.

The race of Africanized bees is Apis Mellifera Scutellata.

It was introduced in Brazil.

The African honeybees are any of the races found in Africa. The Africanized honeybee is a hybrid between the European and African bee. Texas feral colonies typically will have at least some African genetics.

That Africanized honeybee is typically referred to as AHB

It was bred to make more honey, and it was thought breeding an African bee with a European bee would mellow it down. Dr Kerr was the one who made this breed. The European bees weren't doing well with the tropical climate, so he decided the African bee would be a good candidate to breed with.

He placed queen excluders over the entrances so the queens couldn't get out and breed with the local bees. The hives became defensive and were moved to a remote location in November of 1956. A worker removed the queen excluder on the hives, causing the bees to get out. They spread about 200 to 300 miles per year. They were the most biologically successful invasive species of all time. They were limited of northern expansion because of the climate. On October 14, 1990 the bees crossed the border into Hidalgo, Texas. The first AHB infestation was in Lost Hill, CA in 1985. A bulldozer worker saw a dead fox and went to investigate, and found that it had been killed by the hive that was in the burrow. Once the hive was destroyed, it appeared the hive had been there for over a year. It had been thought to be brought in from Venezuela.

The AHB is very defensive of its' hive- European bees will typically send out about 20 bees to chase you off, and AHB will send out hundreds. They also react to a lower level of stimulus. They pursue for a greater distance, about 400 yards.

If you find a swarm, don't disturb it. If you or your family are allergic to bees, it is smart to carry an EpiPen with you. Don't disturb the swarm, and if you aren't prepared to get a

swarm, especially when you know there are AHB around you, don't attempt to remove then swarm.

If you get attacked, run in a straight line as far as you can

Protect your face! Cover your ears, eyes, nose, and mouth. Get to an enclosed area and stay there. Do not swat the bees, and call 911. If you get in your car, do not attempt to drive away, since you can crash if you are getting stung. Turn your AC on as cold as it can go, and as hard as it can blast toward you. This should help get the bees off of you.

If you get stung, remove the stinger by scrapping it off. Wash affected area with soap and water, and apply ice. You should seek medical attention if you have trouble breathing, or hives are covering a large part of your body. Also if you have 5-10 stings per body pound, since that could cause venom overdose.

European honey bees typically use an enclosed space of about 40 liters. AHB will use as little as 1 liter.

If you know your area has AHB, you can help to remove potential nest sites, such as overturned pots, cinder blocks, unused grills, etc.

The swarm season is between March and July, so be vigilant.

If you see bees coming in and out of a hole in your wall, DO NOT seal the hole. The hive will be trapped in and die, leaving their honey and brood. It will smell very bad, and attract many other pests. Remove the bees first. Txbeeinspection.Tamu.edu is a website where you can contact bee and swarm removers.

Bees typically like to swarm into meter boxes, so watch those closely and be careful around them.

AHB out competes the EHB in almost every area. Queens typically mate with 15 to 20 drones. If a EHB mates with an AHB, the result will be an AHB. They also develop much faster. A EHB queen takes about 16 days to develop, whereas an AHB queen takes about 14. EHB workers take 21 days to develop and AHB workers take about 19 days to develop. Drones are the same amount of days (24). AHB swarm much much more than EHB as well. They also produce more drones, and earlier in the year. AHB also abscond much more, which is a colony's reaction to low resources, disturbances etc. this makes them produce more, and also even meaner. AHB will also usurpate a EHB hive. This means a few AHB workers will infiltrate a EHB colony. It only takes a few days. for them to take over the hive. AHB also are less bothered by mites and small hive beetles.

AHB workers are about 10 percent smaller than EHB workers. Laboratory testing is the only way to differentiate AHB from EHB since visual differences are not reliable.

AHB also use smaller cells than EHB. AHB use about 4.9 mm and EHB use about 5.4 mm.

Presentation concluded at 7:58pm

Meeting concluded at 8:02pm