

Steps to Swarming

WHAT THE HONEY BEES ARE DOING/THINKING

1. First reliable consistent incoming pollen and nectar of the season begin being brought to the hive. Bees are happy and start rearing drones.
2. Incoming nectar and pollen from foragers begins clogging the brood nest. (there are more foragers bringing in nectar and pollen than there are nurse and house bees to move it out of the brood nest areas of the hive). The queen is forced to look harder and harder for places to lay eggs.
3. Increasing population of nurse bees (emerging brood) causes congestion in the hive and queen pheromone perception is reduced because of increased population. Bees start producing queen cups. (FUN) Lots of young nurse bees are secreting lots of brood/queen food (royal jelly) there is plenty for queen rearing.
4. Nectar flow kicks in really strong, more and more backfilling in the brood nest occurs. Baby Bees are secreting lots and lots of royal jelly (baby queen food.) Young bees (house bees) are secreting wax like crazy as a result of the incoming nectar. Queen is having an increasingly hard time finding brood nest areas to lay eggs.
5. Queen lays eggs in queen cups. Nurse Bees feed the eggs in the swarm cups to become new baby queens. Nurse bees are producing large amounts of royal jelly to feed these baby queens. Clock starts ticking to day 16 when new queen will emerge.
6. House bees continue creating swarm cups. Queen continues laying eggs in swarm cups and in places in the hive where she can find laying space. Queen loses weight due to reduced egg laying.
7. New Baby queens are metamorphosing into pupae and baby bees. Queen brood pheromone from QC is changing. Bees prepare to do the actual swarming. Scout bees begin foraging for new nest site.

WHAT THE BEEKEEPER SEES / CAN DO

1. *Stop feeding colony (if you have been feeding)*
2. *Add honey supers. This adds additional comb space for the house bees to move nectar from the brood nest area up into the honey supers. If you have foundation only, add one super at a time, directly over the brood nest. If you have drawn comb supers add one super initially. Once the bees have started filling out the middle 5 or 6 combs with nectar, add additional supers (2 or 3, depending on the nectar flow).*
3. *(see number 2)*
4. *Remove 2 frames of old comb from each brood box and replace with foundation in the second slot in from the outside on each of the side walls. (position 2 and 9 in a 10 frame hive, position 2 and 7 in an 8 frame hive). (this allows the house bees to build comb inside the current colony, provides space for the queen to lay eggs.*

this can be done at the same time as step 2
6. *Uh oh. Beekeeper inspects colony, sees queen cells.*

Beekeeper can cut out queen cells as long as she is sure there is a queen or eggs. But the bees will likely just rebuild – cutting queen cells sets bees back 16 days if you get all of them.

MAKE SURE YOU HAVE EXTRA EQUIPMENT

GET READY TO CATCH SWARM (SWARM KIT)

HANG SWARM TRAP NOW!

Buy Mead!

Locate Queen and make an artificial swarm.

7. *(see #6)*

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8. Baby queens are about to emerge (day 15) they begin piping. Old Queen and Bees swarm out of hive (+- 30% of adult population) and cluster in nearby location while scouts find new nest site

9. Scouts recruit for new nest site and reach consensus about where to go (this takes several hours – several days)

10. Swarm cluster moves to new nest site

11. “Parent” colony is now queen less with some quantity of virgin queens emerging and probably a significant number of immature queen cells being fed to bee queens (insurance policy.)

12. Bees continue to rear eggs and larvae to become queens and wait for the newly emerged queens to mate and return as fertile queens

13. Virgin queens mate and reduce number of queens in hive to 1 (they fight to the death).

14. If lots of young queen cells are present and population is still strong, the older new queen(s) swarm out with more of the adult population and leave emerging queens behind (after-swarming)

15. Virgin queen matures and mates, returning to hive fertile.

16. Queen begins laying eggs and hive resumes normal foraging/brood rearing behaviors.

8. Beekeeper gets call at work from husband. “Babe, your bees are in a tree and the neighbors are having a fit.” Beekeeper goes home from work immediately and gathers swarm into new hive, or stabilizes them into a temporary box and put it in a COOL DARK PLACE (basement – simulate night time)

9. Beekeeper installs swarm into new hive just before dusk. FEED FEED FEED. Drink Mead!!!

10. Check parent colony for queen cells. Reduce number of queen cells to 1 or 2.

11. Close colony and wait 3 weeks before inspecting again.

Queen emerged yesterday. She will mate in 5 days for 5 days and then it will take 5 days for her to start laying eggs.

After 15 days there will only be a few tiny eggs in the hive and the bees will be covering this brood. 7 days later there should be a small patch of large larvae (or maybe a little bit of capped brood) and lots of eggs. Beekeeper should be able to see this.

12. If there are no eggs/brood in the parent colony after 3 weeks, call an experienced beekeeper to help you double check. You can buy a queen for this colony or unite them with the caught swarm.