

Stahlman beekeeping notes for 2021

Issue # 33 Summer Requeening

I am often asked “Should I requeen my hive?”

I am of the opinion that one can requeen anytime! It is easiest to determine that a hive needs a new queen when the old queen is failing. However, queen seem to fail more often than in the past. One major reason is the various problems encountered by queen breeders. One would think that with Artificial Insemination stock would be improved greatly. We have so many hybrid choices when it comes to selecting a queen to purchase.

Stock has been bred for mite resistance for well over 25 years. To my knowledge we have some good lines of bees that show promise of being very hygienic. Thus, I would consider any description of a queen that indicates hygienic behavior as desirable. Hygienic behavior can be checked by a beekeeper with a few simple test.

Don't fall for the Survival stock label! If a person is selling queens – the stock did survive. Any queen sold is really survival stock!

Hygienic can be defined as:

Conductive to maintaining health and preventing disease, especially by being clean, sanitary.

Some test that can help determine hygienic behavior.

A Sustainable Approach to Controlling Honey Bee Diseases and Varroa Mites

Testing Honey Bee Colonies for Hygienic Behavior

SARE Outreach

Marla Spivak, Gary Reuter | 2021 | 6 pages

[Testing Honey Bee Colonies for Hygienic Behavior - SARE](#)

This is a great article on how to do a check for your own bees. Marla and Gary are highly respected researchers. This fact sheet can be downloaded as a pdf file.

Some basic facts on requeening a hive of honey bees.

- A hive to be requeened must be queen-less!
- The larger the bee population in a hive the more difficult it is to requeen.
- Requeening in the spring has many advantages particularly in finding queens to be replaced.
- Requeening during a period of dearth (robbing season) is a poor time to requeen.
- Thus, requeening before June and after August are better times to requeen.
- Also, if a hive has started queen cells and they are present in a hive, an attempt to requeen a hive will result in failure.
- The same applies to a hive that has raised a virgin queen. Often this presents some problems because there will be some capped worker brood but no eggs or larva. A few days later, all brood will have emerged but the queen may not have started to lay eggs. It is wise to wait a few days after all brood has emerged from cells before introducing a new queen.

There are a number of ways to introduce a new queen to a hive of bees.

The general rule is to place a queen into a queen cage with a barrier (queen cage candy) to prevent the new queen from being released from the cage until the old queen pheromone has dissipated from the hive and the bees are ready to accept a new queen.

If the bees start new emergency queen cells, it is because the queen pheromone has dissipated and **successful introduction in that case will require the beekeeper to destroy the cells the bees have started.**

Thus, shortly after the old queen is removed from the hive, the new queen should be introduced. That is why the queen cage method works. I generally place the new queen in the hive shortly after the old queen is removed. The cage protects the new queen from aggressive bees during the period they have not yet figured out that the old queen is gone.

Another question is often asked, "Should I remove the attendant bees in the cage before I introduce the queen?"

Some beekeepers will definitely say yes. I am aware of few beekeepers that made the mistake of trying to remove the worker bees from the cage and unfortunately watched the queen escape along with the worker bees. If the worker bees are removed, one easy way is to cut a plastic queen excluder so that it can be fitted over the exit hole in the queen cage. In that way, the worker bees will exit over time and the queen remains behind in the cage.

Another way would be to take the queen cage with attendants into a closed room with a window. If the queen did escape, she would not be able to get out of the room and would fly toward the light where she could be captured and placed back into the cage.

If buying queens in a battery box, the queens are caged without worker bees and are attended to by a number of free roaming bees in the battery box.

I have introduced queens to many hives over my beekeeping years and have used caged queens with and without worker bees. I really have not noticed a difference.

One factor that is important is the time it takes to release the queen from the queen cage. The three-hole Benton queen cage that is in common use with those packages from southern sources has a larger candy block for the bees to chew through before the queen is released. This is an advantage over the EZ-BZ or California queen cages that have a tube of candy for the bees to remove before releasing the queen. I often use tape over the candy tube for a day to make sure the bees don't release the queen too early.

Placement of the queen cage

The queen cage should be placed in the brood nest as close to brood as practical. Often it is placed between two frames but if one is using a double deep brood chamber, it can be placed above the top bars of the bottom hive body. Proper placement should always be close to the bee cluster.

Why requeen during summer to late summer!

The signs of a poor performing queen are evident in the following:



Obviously something is wrong with this frame of brood.

These cells are scattered about on the frame. They are dome shaped.

One other issue – no stored honey in the frame.

Could this hive be saved by giving it a new queen?

If there is a small population of worker bees in this hive, one might think it possible to save the hive.

I do not share that opinion. Save the money you would spend for a new queen! It might have a number of laying worker bees. With no reserves of young brood and no honey this hive is surely going to die – no matter what attempts might be made to save it.

It might be combined with a good strong healthy hive of bees but don't count on it helping that hive very much.

Action to take: Try to save all the drawn comb for next year. One might place the frames in a freezer to avoid wax moth or small hive beetle problems. A new package of bee introduced to this hive will take advantage of the drawn comb. The new bees will clean up all those drone cells and other problems that may exist.

If placed on another hive, the bees in that hive if very strong may clean it up. If the hive still has undrawn foundation, don't count on the bees in a stronger hive to draw out that foundation this late in the bee season.

[An old adage in beekeeping literature is this: Take your losses in the fall and make increases in the spring.]

Another good reason to requeen now is a hive that has a bad temper. I am going to suggest a way to do this. Bad temper hives usually have large populations of bees.

Aggressiveness in bees is a genetic issue. One characteristic that worker bees inherit from their mother (the queen) and their father (a drone) is aggressiveness. I don't think I need to go into signs one should look for with aggressive bees. A queen in an aggressive hive can be replaced with a new queen from gentle stock. Beekeepers and their neighbors do not need to put up with repeated stinging incidents.

The solution is to replace the queen.

Do not kill the queen expecting the hive to raise another queen. The new queen will also carry the genetic line of her mother most likely producing more aggressive bees.

In next week's article, I will share my method of finding the queen in an aggressive hive. Replacing her then with a queen from gentle stock.

To wrap up this week's article, I would like to share a question I received about replacing a queen.

This question came in on my email. "How do I requeen a **two year old** that has been good?"

I am not sure how many of you have read "queens need to be replaced every year or two"?

I find it hard to replace a queen that is described as "good".

It is a common practice for commercial beekeepers to replace queens on a schedule. The reason for this is understandable. They know that young queens are more productive than

older queens. Fall requeening is common because a good queen will have a lot of brood that will lead the hive into winter. With a young queen, the overwintered hives will on whole achieve a quicker bee population build-up in the spring. When one is dealing with several hundred to thousands of hives, this is important!

But, I am now a hobby beekeeper! I have time to inspect my hives and replace queens when they begin to fail. A good queen in my opinion should not be replaced! In fact, as a former queen producer, I select breeding stock from those "good" queens.

I currently have about 30 hives of bees. There is a lot of variation among those 30 hives. Some were very productive (gave more honey than others). A few were what I call "welfare hives". Those are the hives I decide need new queens. (Spring, summer or fall) when a queen shows signs of failing, it is time to replace her. Sometimes the bees beat me to it – they begin supersedure cells. It is at that time that I must make the decision to keep a queen that supersedes her mother. I can usually identify these queens because all of my introduced queens are marked. If I find a queen in a hive and she is not marked, I like to wait a bit before I replace her. She may be just as good as any queen I might buy! Often, she is not as good!

If a queen does need to be replaced during August, the beekeeper will usually have a difficult time finding the old queen because of the large bee population. It is always easier to find the queen in a hive when hive populations are small.

Next week – How to locate a queen in a strong hive.