

# STAHLMAN BEEKEEPING



2025 Vol. 7  
Issue # 14

## NOTES FOR 2025

Published by Dana Stahlman Raleigh, North Carolina

Published free as a public service to anyone interested in honeybees. Email me to be added to my mailing list. [stahlmanapiaries@aol.com](mailto:stahlmanapiaries@aol.com)

### Queen Introduction

This is a topic that seems pretty simple and many books and articles have been written about the subject. I was asked several weeks ago by a beekeeper here in North Carolina for advice on requeening a colony of bees. I have tried various methods and have learned this:

- *A colony with queen cells – **Ordinarily no new queen introduced to a colony with queen cells will be accepted.** Even if all queen cells are cut and one is missed, the bees will kill the new queen. There might be a rare case in which a colony might accept a queen but I have found the risk too high especially with the cost of queens today.*
- *A colony with a live queen – **a new queen introduced into a colony with a live queen will also result in bees killing the new queen.***
- *I have also learned that it is difficult to introduce virgin queens into a queen-less colony of bees.*
- *Queen cells on the other hand can be placed into a queen-less colony and are accepted. In fact, a queen can be removed from a colony and queen cells will be immediately accepted. I have seen this work many, many times when I removed mated queens from mating nucs and gave the mating nuc a queen cell to raise another mated queen. Using queen cells in place of mated queens is common when hives are split.*
- ***Bees that have been queen-less for 24 hours will begin to build queen cells. Once queen cells are started, bees are likely to kill any queen – even those in cages when they are released.***
- ***Queens must be introduced in some way to protect them from being killed.** The usual method is to use a protective cage with a candy compartment that will require bees three days or more to release her.*

About the only disadvantage of Spring requeening is the possibility of getting poorly mated queens with the issue of supersedure slowing down colony growth.

### Replacing Failing Queens in established hives:

**When should I replace a queen?** I know pretty much what kind of job each queen in my hives are doing. I use the merit system. I replace a queen when she is not doing a good job. It is true

that young queens are more productive than older queens. Thus, many beekeepers wanting a good honey crop re-queen every year based on that fact.

The earlier a queen problem is identified, the better a hive of bees has for a chance to survive.



Queens in a hive are attended to by worker bees. As shown here, she is surrounded by a number of bees that take care of all her needs. Her pheromone is spread about the colony and as long as she can maintain a good amount of the queen pheromone, the bees will be active and calm going about their duties.

**Most queens sold are not marked.** I would suggest that marked queens be bought or that one-mark queens shortly after they have been installed in hives.

- If a marked queen is superseded by the bees the new replacement queen will have no mark, thus the assumption can be that the colony did not accept the introduced queen for long.
- In addition to being easier to find, a marked queen can provide information on her age.

This is a marking tube making marking a queen easy and it inflicts no injury to the queen.



If little or no queen pheromone is being passed among the bees in the colony, the bees will:

- Make loud buzzing sounds, and will exhibit agitated behavior including what is termed running about the hive.
- The bees - if larvae is present - will begin to build emergency queen cells. This happens within a short period of time and is apparent when queen cells can be seen in a day or two.

Thus, it is important if one is going to replace a queen to wait until they have a new queen in hand. The new queen should be introduced immediately after the old queen is removed. Waiting to introduce a queen will only give the worker bees more reason to kill her. I would advise that a beekeeper install her immediately or wait not much more than a few hours. A caged queen will alert her presence to the bees by releasing her own pheromone and it will be natural for the bees to gather around the cage she is in. This is both good and bad.

- The bees are aware that a queen is present – not their own mother queen.
- The natural reaction for honeybees is to kill the strange queen and they may try to bite and chew at her especially her legs.
- However, with the old pheromone gone and queen cells not started, the worker bees come around to accepting this new queen.
- The key to all of this is it takes some time for it to happen!

I am going to share the wisdom of Elbert R. Jaycox with you. Many of you have no idea who he was but he influenced much of what I know about honeybees. “Jake” as he was called wrote

several beekeeping books – more like manuals about bees. They can still be found doing a google search. I can highly recommend any book he wrote. He passed away in 2004.

**From his book “Beekeeping Tips” he wrote:**

Queen introduction into established colonies is most likely to be successful if you:

- Introduce her alone, without attendant bees.
- Provide large mesh screen on the cage so the workers can feed the queen through it easily.
- Put the queen into the colony as soon as possible after removing the old queen. (Less than two hours is best).
- Try to have the queen confined to the cage 3 to 4 days if possible. Do Not punch a hole in the candy; instead, add more candy.
- Put a little candy in the cage if it is one that does not have a candy plug.
- Feed the colony sugar syrup before and during the introduction process. (This will not be needed if there is a nectar flow).

From experience I have enjoyed over my 86 years, I can not say it better. I have made a number of mistakes that caused queens to fail and die during the introduction process. Let me share a few of them:

- The queen cage should be placed as near to brood and bees as possible. Putting a queen cage on the bottom board, at the hive entrance, or on an inner cover above the bee cluster all reduce the chance of successful introduction.
- Queens should be installed as soon as they are purchased. Holding a queen in queen cages for any period of time may reduce the success rate for acceptance by bees. I know a queen can live in queen cages for several weeks stored in dark cool location. However, the stress and lack of laying eggs I believe has some negative effects.
- Queens in queen cages should not be set on top covers with a full sun beating down on them. Heat can kill them in minutes. Keep queen cages in the shade away from exposure to the sun. This includes not keeping them in a hot car. One of the biggest mistakes I made in my beekeeping career, was to stop for lunch on a hot day, and leave over 50 queens in a battery box on the front seat of my truck. The buzzing I heard when I went into the restaurant was nothing but silence when I returned. Attendant bees and queens most dead. I was able to save a few.



While I think about the beekeepers that influenced my life, I owe so much to people such as David Miska and Billy Engle shown in this photo. To all new beekeepers, realize this – “the people who teach you continue to live in your memory.”