



# **STAHLMAN**

## **BEEKEEPING NOTES**

**2024 Vol 6  
issue # 09**

Published by Dana Stahlman Raleigh, North Carolina Email: [stahlmanapiaries@aol.com](mailto:stahlmanapiaries@aol.com)  
Published free as a public service to anyone interested in honeybees. Email me to be added to my mailing list. Published 3-2-24

**This weeks issue has been a bit challenging with so many options available to beekeepers.**

**Over the last 7 years, I have mentored a number of individuals when they started keeping bees. Many of them still stay in touch with me. They have provided me with subject matter for these newsletters and this year is no different. I am again on the list to mentor more students from the Wake County Beekeepers Association here in Raleigh. Generally, the club assigns students to members that live within 5 miles of their location. That is the reason I can share so much information about issues they face.**

**I checked earlier issues I have written and will include some of them as attachments in up coming issues to add to the message I send out. Rather than reinvent the wheel, I will take advantage of what I have written about and share it with new readers.**

**2024 is starting out with issues that repeat year after year. These issues fall into 3 catagories (dead-out hives, weak hives and strong hives). Every one that starts beekeeping usually starts with a package of bees or a small nucelus hive. They have a choice of bee equipment. A few have long Langstroth hives , 8 frame hives are becoming common and the universal 10 frame hive. Add top bar hives to the mix and one student was sold on the Warre hive who is no longer keeping bees -- I have a lot to work with. I am a bit old fashioned – I grew up with the 10 frame Langstroth hive and I still prefer it for myself. However, any hive with frames can be managed in much the same way. Long hives are a bit difficult to move. For a hobby beekeeper, they do offer some advantages but I will not be spending much time on how to manage them. Instead of adding supers frames are added to take care of bee population growth (I know of one long hive that can be suppered).**

**The easiest issue to deal with is a dead out hive. If you have other hives, options are available. If not order bees to put back into the hive equipment. The answer to other hive questions will follow in this issue and the next.**

**This will be a part of a three part series (Strong hives Part I and II) and then (Weak hives Part III)**

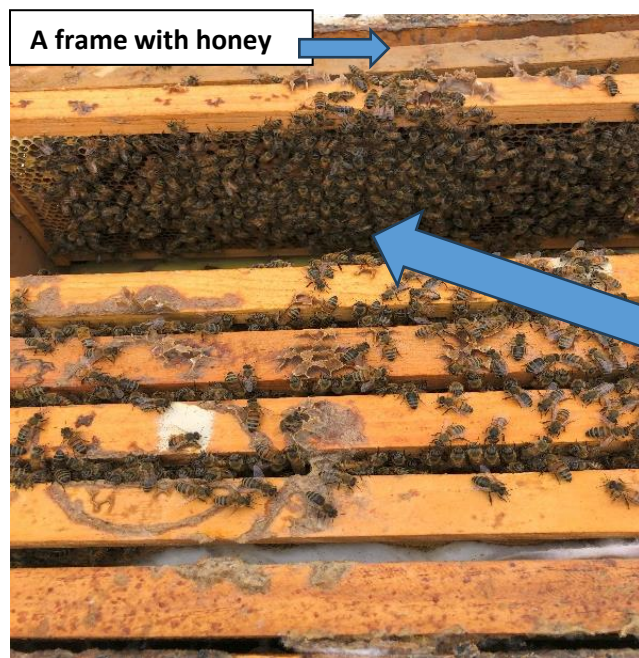
**Dealing with a strong hive – now is the time to get busy.**

**The first task of keeping bees successfully is getting them thru the winter season. I listened to a state bee inspector give a talk on Wednesday night about determining the condition of a hive. [This is very important for any beekeeper to learn.]**

It can only be done when actually working with bees. Pictures can illustrate many points but the real learning takes place when frames are pulled out of the hive and examined. One can not call themselves beekeepers if they just look at a hive. (Stand back and watch bees come and go from the entrance)

- If bees are coming and going out the entrance of a hive one often assumes the bees in the hive are alive.
- The problem is that bees also fly into and out of a dead hive. Those bees are robbing existing honey stores remaining in the dead-out hive.

I have selected to share information about what to do with a strong hive because in my opinion it is the type of hive that needs the greatest care right now! The pictures in this weeks article were taken when I visited AnaRita Eason this past week. That is her in the picture on page 1. I will try to answer some of the questions she asked me. She has what I call a bench mark hive-- one that teaches us what a good hive is!



If you live in North Carolina, this has been a mild winter with good survival rates. Not all bee hives are equal in strength. Thus, it is very important for those of you reading these articles to establish some kind of bench mark of what a good hive looks like.

This is a top view looking down into AnaRita's hive with a strong February population of bees. (Picture taken this week)

Three frames of capped brood were taken from the open space shown here. The remaining seven frames had some bees on them as shown. The outside frames located at the top and bottom of this hive contained capped honey.

There was a box below that had some bees in it but most of the bees were located in the center of this photo. That white between the two bottom frames is a swifter sheet used to capture small hive beetles.

There are many issues to be dealt with! The most obvious issue to deal with is the bee population. It is rather easy to see how many frames in this hive are covered with bees.

AnaRita keeps good records and she recorded in her note book much of what we observed in this visit.

When I visit a hive I like to know what it is I can do to help the beekeeper. I follow a few established things to check:

- How good is the queen?
  - In this case I could observed a strong bee population but really the question is how good is the queen?
  - The way to determine this is to pull frames and examine the brood pattern. It is not necessary to actually see the queen. By the way this queen was doing a great job with all stages of bee development present –a solid brood pattern located in the middle of the winter cluster and important at this time of year, some capped drone cells were present.

- Does the hive have honey reserves?
  - It did have and we discussed adding a feeder (she uses top feeders). She decided that she would start feeding – (this bee population needs a lot of food to support life and brood production). Note- I have seen large hive populations in spring die of starvation even with pollen and some nectar being brought back to the hive! The problem of feeding has a double edge to it –
    - One - it is necessary to have food in the hive so they don't starve.
    - Two - feeding stimulates brood production which causes the hive to swarm later.
- What is the mite situation in this hive?
  - When frames are examined in a hive, mites are hard to see. But other things such as brood diseases etc. can be observed. There was nothing like chalk brood, or other evidence of brood disease present.
  - AnaRita was prepared. We did a mite count. She and I have been thru this before.



She did a sugar roll test. This was the result:

One mite – it may look like two in this picture but with a magnifying glass one was a chip of comb or dirt and one mite was visible moving its legs.

Not bad! She does know that her hive has some mites – but so far the issue is not serious.

We discussed treatment and she will start early. Her bees seem to be very hygienic. She does have good stock and I would prefer that beekeepers try to find good stock to put into their bee hives.

I might mention that the bees were very gentle and easy to work. It is a hive like this that should be considered as a breeding possibility to raise new queens. This is another step that beekeepers can take to learn more about keeping bees.

Rather than telling her what to do, she asked some interesting questions that I can answer for her and others about a strong hive that will certainly swarm if no management is followed up.

A hive like this offers a number of management possibilities:

- It can be split most likely in mid March. There are various methods used to split or make hive increases.
- It can be managed to get a honey crop. (Weak hives really build up slow and the honey flow is over by the time it has enough bees to gather much nectar.)
- It can be used to make up nucs for sale in late April and early May.

For now, we talked about adding a deep super above the brood nest. She would like to restart a dead out hive she lost over winter. As bee populations grow they will need space and moving up is what the queen will do. Later this deep brood box can be set aside with the queen in it and a new queen introduced to the original hive. That will slow down the impulse to swarm by this hive. And later with a large number of foraging bees in the original hive and a new queen, the hive can gather a good honey crop. Remember the foraging bees get the nectar and pollen a hive needs. They also get the honey crop. I might mention that

**we saw no swarm cells in this hive. If there were swarm cells we would have had to deal with that issue in a different way.**

**If you are around honey bees listen to them. There is a quiet time and a time for a lot of noise. Pay attention to these signs. A swarm leaving a hive is an event of sound and sight not to be forgotten. The same goes for a hive being robbed.**

**I like to work my bees when the temperatures are above 60° F and shortly after noon with no unsettled weather expected. I look back at days when the bees “told” me a change in weather was about to happen. It happens when bees become very unsettled all of a sudden or as you work a hive -- a large number of bees return to the hive in mass. I have seen this happen --and -- within 15 minutes a storm appears that I did not see coming. And all hell breaks out! When something like this happens it is time to shut a hive down. Walk away and come back later.**

**Listed below are some pointers on what a good strong hive with a good queen should look like:**



**This is a book mark frame.**

**If frames in a hive look like this, the queen can not do a better job of laying eggs.**

**Note the capped honey in the upper corners of the frame and the row of drone cells located just above the bottom bar. I judge every frame I pull from one of my hives against this frame.**

**The queen in this hive did a great job up to 12 days ago. But a hive in good health**

**with a good queen should also have other frames that will tell a story as well.**

**A great queen like this may be lost because a beekeeper does not manager this hive to prevent swarming. Swarming is a natural event in the life of honey bees. Some are more prone to swarming than others. But the greatest cause of swarming is a brood chamber without open cells for the queen to fill with eggs. I am sure you have heard of queen excluders. They confine the queen to an area of the hive that allows no upward movement to find open cells to lay eggs. A large number of cells below the queen excluder are filled with pollen and honey with the result the queen has less room to lay eggs.**

**Honeybees begin building drone cells before they build queen cells. Drones must be about two weeks old to be mature enough to mate. Thus, bees begin building drone cells first and queen cells follow about two weeks or more later. There are other reason the bees may start queen cells – such as when the queen is killed while the beekeeper is moving frames in and out of the hive.**

**The frame below is a good example of what should be going on within a strong hive right up to the end of a honey harvest. Bee populations slow down in late summer when foraging possibilities slows down – this will vary from region to region.**

**This is another picture of a Frame**

**If you examine this picture closely, notice the cells filled with new larvae (white filled cells). Earlier this frame would have looked like the frame pictured above.**

**As adult bees emerge from cells the cells are quickly cleaned so the queen can return to lay eggs. This frame clearly shows how cells are used over and over again for brood rearing. This frame shows an outer layer of capped mature worker cells. Just below this outer ring are cells containing eggs.**



**The white looking cells are filled with new larvae varying in age. The center is newly capped brood.**

**It is a great feeling to see a hive developing like this. Some 2000 eggs being laid every day. And everyday beyond 21 days when the queen lays an egg, two thousand new bees are added to the total bee population. Soon bees gather outside a hive because of limited room within the hive. Hive populations often reach levels of 60,000 to 80,000 bees by the beginning of summer season.**

**This is why bee inspections are important. Things are going on in the hive which may surprise you in many ways in just a short period of time. If a hive swarms (and they will) by the time you see bees gathered on the front of a hive, there isn't much one can do to stop them. Even the best beekeeping management often fails to stop a hive from swarming.**

**Next week ( Hives with queen cells present) Strong hives Part II.**

