2026 Stahlman Bee Notes

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A Long Winter

I am facing cabin fever! With this extended cold (unusual cold) weather, I am hunkered down trying to stay warm and bees are on my mind. With some warmer days in mid-February, I was able to determine that most of my colonies have survived to now but winter is not over. I finally had a chance to open some colonies housed in a deep and medium super. My goals was to check for brood and move honey frames closer to bee clusters. I was not looking for queens – just evidence that queens were present. With smaller concentrated bee populations, queens were easy to spot because they were marked. What I was looking for was not found – evidence that the queens were laying eggs. The bees were almost absent from the bottom deep box. The winter clusters covered four to six frames which indicated that bee populations were not a problem.

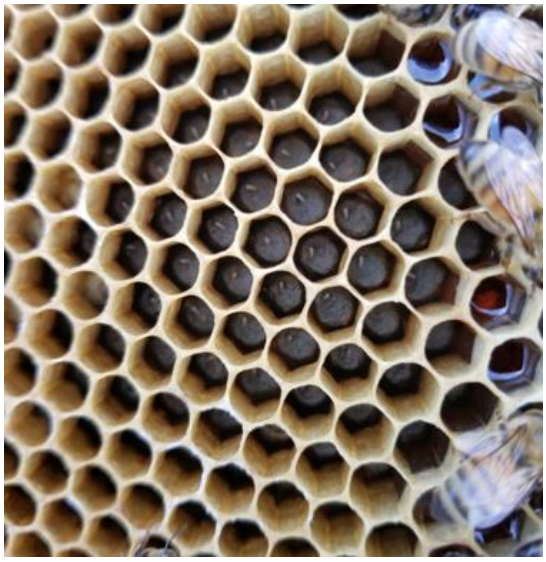
My concern is that brood rearing has not started – at least I did not see evidence of it. In years past, I have been able to find brood as early as January 1. There are reasons I am concerned.

- **New bees are needed to replace old bees that die.**
- **I need to have hives ready to split or gather a honey crop. Small weak hives cannot do either.**

I am into "what is the cause for this delay in brood rearing?" If I were keeping bees in Ohio, I would not be surprised to see no brood by mid-February but here in North Carolina I am concerned. The weather has been extremely cold and trees show little evidence of blooming – especially maple. It was so unusual for me to see Ohio like weather here in Raleigh.

I have always known that the main tasks for keeping bees is "what I do in the next few weeks is important, if future goals are to be met." My main object has always been to build up my colonies to have strong bee populations by the time the honey flow begins. Here in Raleigh that begins in April and ends by June. Strong colonies make honey – weak colonies and developing colonies do not. New beekeepers are lucky if a newly started package of bees develops quick enough to get some honey stores that can be harvested. Local beekeepers often sell nucs or rent bees for pollination – failure of bees to increase bee populations will also affect their customers. The demand for bees early in the season is because new

beekeepers and those beekeepers wanting to replace dead out colonies don't want bees later in the season when honey flows are over.



This is what I was looking for:

1) Opening a hive in cold weather puts stress on bees. Just imagine going into a restaurant and being seated next to the entrance door during a cold day. Each time the door is opened, a cold blast of air rushes across the table and the area where you are located. I know that we are curious about what is happening within the hive, but opening a hive in cold weather is not doing the bees any good. By the way, I might mention that lifting the top cover off the hive leaving the inner cover in place will at least give one some idea that the bees are alive and dry granulated sugar could be placed around the vent hole if food is needed. But it could lead to the mistaken believe that everything is okay.

2) A hive inspection is the only way one can really determine the condition of bees in the hive. I know that lifting the back of the hive can give some idea of a colony's weight, but where are the honey stores! The greatest advantage of a hive with moveable frames is, there is no mystery about what can be discovered within the hive.

When the weather is a bit warmer, one can remove the inner cover and take a quick look between frames to determine the size of the winter cluster.

When inspecting a colony of bees, the goal of the beekeeper should be – Do No Harm!

First, Temperature conditions should be above the temperature that bees begin to form the cluster. That temperature is 57° Degrees F. Most beekeepers would recommend a temperature above 60 or higher before an inspection of frames is attempted. The picture above illustrates several points I would like to make:

- **When a hive is opened, gentile smoke should be applied to calm the bees. Cold bees are not very active and in early spring little amounts of smoke is required.**
- **Frames should be removed from an area where bees are not clustered. This photo shows frames being removed from near a side wall where very few bees**

are located. When one frame is removed, it allows a beekeeper to use the hive tool to separate frames gently by prying frames apart. This causes less effort and is not going to alarm the bees too much. As each frame is removed, it can be inspected for honey and pollen, and evidence of eggs or larva being raised. If eggs, larva, or capped brood are observed, the queen should be located on frames in that general area.

- **Exercise caution when handling frames. Without the side movement of frames, pulling a frame covered with bees up from the center of this hive could be harmful and the chance of killing the queen and some bees could result. Frames not covered in bees should be removed first – these are usually found near the walls of the box as shown in the photo above.**

Actions that might be taken and considered:

1. **If the bee population covers 4 to 5 frames, has a laying queen (egg would indicate that she is present even if she is not seen) most likely everything is in order and the hive has a good chance to be thriving by the time the major honey flow arrives.**
2. **If there are less than 4 frames of bees, a beekeeper is faced with making some decisions or just letting the colony go on as it is. Small colonies develop very slowly and even if the bees survive – will not provide much profit. I have nothing against those that just want to save the bees – That is a worthy reason for having bees. If the bees die, the equipment can still be used to house a new package of bees or the equipment can be sold.**

The art and skill of keeping bees is not built on luck. A hive can be very productive based on management techniques used by a beekeeper.

So many authors have written about this topic. Some such as C.C. Miller have said it is a waste of time to take brood from a strong colony and give it to a poor or weak colony. Others suggest just the opposite. If an individual has time and wants to make the effort, it is entirely possible to save a weak hive of bees but it is not easy and it often results in failure.

If you are not familiar with heat generated by a strong hive of bees, I would suggest you put your hand over the inner cover hole on your next hive visit. If no heat is felt, the hive is either very weak or dead. When I visited bee yards in Ohio, I could also usually tell if a colony in a hive was alive or dead after a light snow storm. The warmth moving up to the top cover would melt the snow in a circular pattern.

Inspections should be short – the brood is quite likely to be in the upper box of a double deep hive. No search for the queen needs to be made. Signs such as eggs, larva, and capped brood

indicate there is a queen in the hive. If no brood is observed, the hive should be checked frequently until you can determine there is a queen or not in the hive.

- **Queen-less and weak colonies should be united with stronger hives. Combining two weak colonies may sound like a good idea but they are weak for a reason. Strong colonies will gain with the addition of more bees, and the result is quicker population build up. Strong hives can be split and increases made which results in profitable beekeeping.**

- **Normal colonies should cover 4 to 10 frames with bees. Splits can be made from hives such as this to avoid excessive swarming or frames could be used to provide help for weak colonies with good queens. I would not reduce any colony to less than 4 frames of bees clustered on frames.**

Warning about moving frames with brood. During cold weather brood in a colony must have a protective layer of bees to avoid something called "chilled brood." If frames are removed from a strong colony and placed in a weak colony, it is likely that the weak colony may not be able to provide the heat required to keep some of the brood alive. What a waste – it takes a lot of effort by bees to feed developing brood. For that brood to be chilled and killed by the cold just cancels a lot of work accomplished by the colony that donated the bees.

This is a colony that is on the verge of dying. The bee cluster is alive but the number of bees in the cluster is just too small to support and create the heat necessary to raise brood. I would set this box above a strong colony. The bees that are alive would move down; however, one must consider that they might carry mites, or viruses to the hive they are combined with. Either way, they will not contribute much support to the colony they are joined with.

Let me share some information I have learned over a number of years keeping bees:

- **If one has a few hives of bees, and has a desire to increase hive numbers, it is best to combine weak colonies with stronger colonies. Once queens begin to lay eggs, a strong colony grows very fast. Weak colonies just hang around.**

- **If a colony has a queen but she is not laying as I saw with my bees this week, it might be caused by weather factors. Bees on warm days begin to forage. Any sign that pollen is being brought into the hive should result in the stimulation needed by the bees to increase cluster temperatures which in turn result in the queen beginning to lay eggs.**
- **Strong colonies at this time of the season will swarm early. Check for drone cells – Drone cells are an indication that swarming is on the bees agenda. Feeding bees encourages bee population growth and swarming especially when abundant (nectar and pollen) is available.**

I am always looking for ways to replace hives that die out. Do not be too eager to make splits while the weather is so variable. Depending on weather conditions, many early splits fail if cold weather returns.

It is human nature to be impatient. The right time to make splits will depend upon where you live. A study of your bees will indicate the best time to make that decision. While you are waiting, order all the supplies you will need, build your supers, and get foundation into frames. If you have more time, use it to read about management techniques that help to deal with swarming, making increases, and getting a honey crop. There is so much information about these topics and you will find that not everyone will agree with procedures. Anyone keeping bees discovers after a few years that methods have to be adapted to your way of keeping bees.