

# Stahlman beekeeping notes for 2021

## # 3 Issue for 2021: Some thoughts and more January Management

I am well aware that the my beekeeping notes do not fit every situation and I try to refrain from being insistent that my way of beekeeping is the only way to keep bees. Any feed back from you is appreciated.

This past week I faced a problem understanding technology – I am trying to keep up but you need to understand that I started out in the 1960's with Commodore 64 computers and floppy disk. It seems like I have had to buy a new computer system almost every 10 years or less over the past 50 + years. The Windows 95 era is gone – I have a lot of programs for that system that just don't work on the current Windows platform. In fact, Microsoft doesn't even support what I have. I just ended up buying a new computer and have a closet full of old out of date programs and computers. I am in the process of going wire-less. At 82 I am going thru a learning curve that is somewhat challenging.

It is rather unique that the bee equipment I have – some of it brand new is not much different than what was used by my grandfather a 100 years ago. New things come along like the flow hive but somehow they attract attention and then disappear over a period of time – something like the hula-hoop. The long hive idea was around long ago. Top bar hives have been around from ancient times.

I have bought a lot of gadgets related to beekeeping and I always use one such item as an example of how unwise I was. I attended an American Beekeeping Federation meeting and listened to a presentation made by a guy who was selling a hive stand that would hold four hives. Its unique feature was the bottom brood boxes of each hive could be slid out somewhat like pulling drawers out of your dresser. Boxes above the bottom brood box remained in place. It was made of steel and could be moved with a skid loader. This allowed the beekeeper to open a hive and examine the brood chamber without lifting suppers off the hive. I bought one! Good thing that I only bought one! The \$300.00 it cost was enough to teach me to let others try new ideas and wait around till they prove out.

Do you have any idea how much steel hive-stands weigh? The frame was made of steel, but the other metal parts were standard iron, levers, springs, etc. They rusted and trying to remove a hive became impossible unless you had a lot of oil and grease to lubricate the sliding racks. Bolts rusted and by the time I hauled it to the junk yard, it was just taking up room and was a daily reminder that \$300.00 just went down the drain!

The point: I am still learning. I hear of sensors being placed in bee hives to monitor temperatures, moisture, and weight. They are connected to the cloud so the beekeeper can monitor a hive without ever lifting a top cover. To me, I would rather lift the top cover and see for myself what is going on.

Now is an important time to know what is going on inside your bee hive or hives!

I participated in a Zoom meeting on Tuesday night. Earlier in the day we had a high of 55° F and standing among my bees, I could see bees returning with pollen on their legs. There was a lot of activity at many hives. A question was raised during the zoom meeting that fit rather well into the subject matter that I had planned to write about this week.

**Beehives in late winter do need attention!** To me the most important factor in keeping bees is to know how a colony of bees is doing and what I need to do to address any problem I see with a hive. (Established hives even if dead provide a beekeeper with much more to work with than those beekeepers just starting to keep bees). Drawn comb is an extremely valuable asset. It is something a new beekeeper does not have available.

If you are a new beekeeper reading this do not be dismayed. After your first season, the comb in your hives have value even if the bees in the hive die. You will read in these articles how the many years of keeping bees allow me various options to manage my surviving hives of bees and use them to make up and replace hives that die out. All beekeepers (new and experienced) face the fact that some hives do not survive the winter season. If you are new, you will be going thru the same process I am going thru with my computer technology issue. It takes time to learn processes and task to make something work!

The question asked was "Given we are now in January, when should we plan on opening up the bee hives and check on how the hives are doing?"

There is no exact date on a calendar that one can say, "This is the day to look inside my bee hive!" Always check outside temperatures to determine when you visit the hive to do any hive manipulations. Almost all books and experience beekeepers will say the temperature should be in the 60° range. That figure will vary by where you live and work bees. Of course, you can open a hive when it is colder but if you do, make sure it is quick – I generally spot check all my hives when the temperatures are in the 50° F range. I do not pull frames unless the bees have broken the cluster. "Broken the cluster" means that the bees are moving about inside the hive.

What I saw happening in the brood nest of my bees this past week.

I am amazed how honey bees are so tuned into daylight hours. Even when it is cold during winter season and the bees are not flying, it seems like the biological clock in the brain of a honey bee is thinking survival. In order to survive, new generations of bees must replace the old winter bees. Thus, the winter cluster has the ability to create the level of heat required for eggs laid by the queen. Thus new bees are being added to the bee population as days grow longer. Brood rearing starts slow and gradually grows according to the size of area the bees can keep warm.

A small cluster of bees do not develop new brood as rapidly as a large cluster of bees. Every beekeeper will notice that some hives are strong while others are weak.

I would like to repeat "THE BEGINNING OF THE BEE SEASON REQUIRES BEEKEEPERS TO LOCATE HIVES WITH PROBLEMS AS EARLY AS POSSIBLE."

At this time of year, I notice hives with three distinct issues:

- Hives with very small cluster of bees barely hanging on. The hive does have surplus food available.
- Hives that need obvious help – feeding is usually required but some may be very strong and require additional room for the bees in the hive. This is an issue especially for those using single deep brood chambers to over winter bees like I do.
- Hives that have died!

Let me begin with the last situation: Hives that have died.

Winter can be a good time to take in all the equipment of a hive that has died. Dead hives usually end up with moldy frames. It is good to clean all dead bees from the frames in a hive and allow frames to dry out in a sheltered place rather than in the hive out in the cold.



Dead bees (head first in comb) usually indicate the reason for dying is lack of food.

Dead bees on the comb will develop a lot of mold on the comb surface when the dead bees are brushed off the frame and set aside to dry.

Mold also indicates very moist conditions for frames in hives left to set outside during the winter season.



Don't discard combs with dead bees in cells and mold on them. If they are dried out and bees brushed off the surface, they will be cleaned up by the bees when put into a hive.

Cleaning up hive bodies of propolis, checking on nails and painting can be done while one is waiting for package bees later this spring. The frames of comb shown (because they do have honey stores) would be great help to a new hive just getting started or they could be used by a surviving hive needing some food.

I also cull old frames from my over-wintered hives in the early spring. Beeswax is a product of the hive and has value. One can save old black comb, and wax scrapings to melt down later in the summer in a solar wax melter. This wax is kept separate from the wax cappings collected during extracting honey. This will be a good topic in early summer.

If one has a place to work, now is an excellent time to prepare for spring by building and repairing bee equipment. As most experienced beekeepers know, order bee supplies and bottles early. When the demand for beekeeping in the spring grows, getting what you need may require a lengthy wait. A good example is trying to buy bottles for honey. At the time honey is harvested from hives, local dealers are usually completely sold out and suppliers of bottles have back-orders for bottles that require sometimes several months to fill.

The last point I will make on the pictures of drawn comb in fairly new frames. Bees will stain the woodenware in a hive over a period of time. Over a period of several years, comb turns brown or almost black if brood is raised in it, cells become smaller, and the wax may have been exposed to various contaminants – thus the value of the frame decreases. These are generally rendered for the wax they contain. They would also serve as bait comb in a swarm trap.

#### **I know that someone will question: When should frames be replaced?**

Many sources recommend every 5 years and beekeepers constructing new frames should date the frame by writing a code on each frame. Many beekeepers use a black laundry marker to mark top bars with the last two digits of the year in which the frames were placed in a hive.

The value of drawn comb cannot be emphasized enough. I do want to say that some frames with drawn comb should be checked for disease and other damage such as wax-moth or small hive beetle damage. I would recommend burning any diseased frames if any question in the beekeeper's mind thinks the comb may contain American foulbrood spores. Many beekeepers I know melt down all the bad comb in frames thinking that the heat would kill the AFB spores in the wax. I am in the old school – Better to be safe than sorry!

**Something to think about: "Every one of you has a mind and with sound judgment and a vivid imagination can become a person of wisdom and knowledge. No one can do this for you but yourself."**

From Sanders Union Fifth Reader published in 1873.