STAHLMAN BEEKEEPING NOTES FOR 2023

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Have your bees made it to 2023?

I have seen many winters and each presents a challenge. I am beginning 2023 with four hives of bees. Actually 3 ½. One indispensable piece of equipment that is often "over looked" is called a double screen board sometimes referred to as a Snelgrove board.

It has many uses in the management of bees. Often it is used in connection with swarm prevention but I have used mine for making up nucs, raising queens, and this winter helping a weak hive survive the winter. New beekeepers most likely will not use one in their first year of beekeeping but any beekeeper wanting to better manage a strong hive of bees will find one useful.

They are available from bee supply dealers or are easy to build. The principle behind the design is to separate bees in a hive. In my case, I had a weak colony with a small cluster of bees. From experience, I was sure it was too small to survive without help. The double screen wire prevents any contact from bees above or below the screen.

Also note it has openings that would allow bees to leave the top box placed over a lower box. Some beekeepers try to save a small cluster of bees by adding bees from another strong hive. That system may work in September when the added bees might contribute to a colony's population growth. But in December that is not a good idea.

Of the three other colonies in my backyard, one was very strong and I selected it to be the host for this weak hive with its queen and small cluster. The bees in the weak hive had clustered on three frames with plenty of food.

IMPORTANT POINTS

Many new individuals will want to become bee keepers this new year according to the number that signed up for bee schools here in the Raleigh area.

Just a word of caution and advice to them!

Don't jump into trying to get bees and hives without first seeking advice from someone who is currently keeping bees. If you cannot find someone – almost every area has a beekeeping organization willing to help.

Quinby, a beekeeper of many years ago advised:

"Watch out because there are people out there that will take your money and not give a twit if you fail!"

(1853)

Best quote from one of my fellow beekeepers:

"Keep it fun, not work!

Go slow, not broke!"

Credit to:

Ray Raynor of Raleigh, N.C.

The bottom brood box was empty. I do check my bees often during the winter season and realized that the time had come to help this weak hive.

The weather was cold and there were no bees flying. I simply went to the strongest hive, removed the top cover, inner cover and checked to see if the bees were alive and well.

They were generating a lot of heat but none ventured to fly – I worked slow and careful not to disturb them any more than necessary. The double screen board was placed over the bees and the inner cover was temporarily placed back on top of the screened board to hold in the heat.

I then went to the weak hive cracked the top box from the brood box below and carried it with bees, inner cover, and top cover back to the strong hive. I removed the inner cover from the strong hive which I had placed over the double screen and then quickly placed the weak hive (box, inner cover & top cover) above the double screen. Job done. No bees lost and hopefully the small cluster will benefit from the heat generated by the bees below the double screen. This is now a hive with two queens and plenty of honey for both to survive.

The principle behind this management technique is simple. Bees in a hive create cluster heat. Heat rises. Thus, the bees below create a lot of heat to help the bees above the double screen. Weak hives with small clusters must work harder at generating heat than a large winter cluster.

A look down into the inner cover hole indicates that the weak hive is still alive. It was too cold to remove the inner cover to think about pulling a frame or two.

As soon as a warm day (60 or more degrees) arrives, I will try to determine if I can do anything else to help them survive. Treating for mites is important and the time to do it is now especially with oxalic acid. This weak hive may make it thru the winter but not without my help.

The first things I want to know as soon as possible:

Have the queens started brood rearing? The next most important thing will be to check food reserves. I know once brood production begins the bees will be using and needing a lot of honey or sugar syrup and pollen. The critical time will be during the months of January, February and March depending upon my climate zone. With cold weather it is sometimes hard to find a day to examine brood frames. If in doubt about the food situation, one can add some granulated sugar around the inner cover hole shown above. Food placed above the bee cluster is better than placing food where the bees must travel over frames away from the bee cluster. The bees will use the moisture available to make it possible to use the dry sugar.

My hives are heavy but I just can't wait until I get a day to pull some frames to check where the honey stores are located in relation to the location of the cluster. Another winter management technique I use is to move frames of honey next to the cluster or above the cluster. I have seen

bees die of starvation far too many times in a hive loaded with honey stores. Bees sometimes starve with honey only inches away! This is truer in those weather zones with long extended cold weather.

Another issue to check is signs of moisture collecting in a hive. Moisture is a big killer of bees. The inside of a hive should be dry. Mold inside a hive is a sure sign that the interior of a hive is moist – too moist. A wet top cover or inner cover can indicate a moisture problem.

The solution is to allow moisture to escape from the hive. There are many ways to do this.

Moisture collects as warm moist air reaches a cold surface. The hive with an inner cover with an upper entrance cut into its rim has a great advantage over most of the methods discussed such as leaving a small space – a crack or so for air to escape from the hive.

Air space is an insulator and if this space is filled with material that absorbs moisture make sure to check it during the winter season. One may be surprised at the amount of water that soaks into some of the materials used thus reducing the insulating value.

Placing hives in low laying bee yards should be avoided. Remember cold air settles toward the ground and if a hive is located in a place where moisture collects, it will be more difficult for proper ventilation to work. I should also mention that hives need to be sheltered from prevailing winds. Bees need fresh air but wind chill factors do have a bearing on bees inside a hive exposed to strong gusts of wind.

As we enter this New Year, the beekeeper must realize a number of things can go wrong within a bee hive and beekeepers are at a disadvantage because weather will prevent hive inspections. A beekeeper can do great harm by opening a hive to do an inspection during cold weather.

Queens are available at this time of year from Hawaii queen suppliers. The time to check your hive or hives is during a warming period when temperatures in the afternoon reach 60° F and the bees are flying.

Some basic facts for the winter beekeeping season:

1) Winter stores are being used up as new brood is being raised.
2) A hive may have lost its queen. If a bee population is present, the hive can be combined with another and that hive split later in the season when local queens become available.
3) Varroa mite counts are important anytime. But at this time the Varroa mite population will be at their lowest number. Varroa mites can only reproduce when bee brood is present. **Treat for Varroa early in the year.**
4) Honeybees live in harmony with weather conditions and plant growth. Know weather patterns and plant flowering patterns to understand the honeybee growth cycle.

5) Daylight hours are getting longer. Do you have any idea of the number of growing days in your location? Do you have any idea of the daily average temperatures in your location? Beekeeping management is more variable during the late winter season than any other time of the year.

My notes are arranged to provide seasonal beekeeping tips and comments. I will be writing about a lot of bee biology. It is core to keeping bees and understanding the what, when, and how questions.

January 1 in Raleigh, N.C. -- The weather has warmed and quick inspections of hives were possible.

A first inspection: **Reason for opening hives**

1) Are the bees alive? Does the hive have a queen?
2) Has the queen begun laying eggs?
3) Do the bees have food?

When inspecting hives during colder days (includes days in the 60's).

4) Work smart and quick.
5) Remember bee glue (propolis) is rock hard and frames are usually glued solid to the rabbet in the super/box they are in. It may difficult to get them out without disturbing the bees.
6) I like to start near the side of the hive body and work carefully removing a frame. These frames usually do not have bees on them. Work to **not disturb** the bees any more than necessary.

My bees are alive. One of the biggest changes in my beekeeping practice is to take pictures with my phone. It is so easy to log information without getting a pad to write information down.

2023 is going to be an interesting year!

Upcoming issues for the month of January:

Issue # 2 Early pollen for the bees/feeding methods - formulas/ keeping a log on my first hive inspection for 2023.

Issue # 3 An observation hive – a great way to study bees – use as a teaching tool.

Issue # 4 A little background history on package bees.

Thinking about articles on: A few comments on money making opportunities (commercial beekeeping); swarm control; replacing queens; comb management; hive increases and something of interest section for new beekeepers.