

# Stahlman beekeeping notes for 2021

## Issue # 20 May issues – getting ready for the honey flow

A person who has a hive of bees that carried over from last year has an advantage over a beekeeper that just starts a new hive this year. Even if a colony died over winter, the frames in the hive will have been drawn out and new bees placed in that equipment is somewhat like a new couple moving into a furnished apartment. Comb in frames provide the new bees instantly a place for the queen to begin laying eggs, a place to store nectar and pollen and requires fewer resources to get started. Frames from last year may even have stores of honey and pollen in them.

Reasons bees put into a new hive with foundation often fail to produce surplus honey the first season:

1. The bee population is small compared to a hive that has survived the winter. (usually)
2. If a package is introduced to a hive, it will be three weeks before any new population will be added to the colony.
3. A nucleus hive with five frames of bees may only contain three frames of brood – but it also is made available to customers later than package bees. Its one great advantage is the fact that the frames will include brood that will add to the colonies growth but the colony will still be required to build additional frames of comb to expand.
4. By the time newly started hives have a strong bee population, the honey flow is about over!

**A hive ready to get a honey crop should have a large adult bee population. Entrance reducers will no longer be needed for strong hives! Don't count on a new nuc or package of bees in a hive for less than six weeks to be able to gather enough honey to fill two or three medium supers. Experienced beekeepers with drawn comb in supers gather much more honey than those starting with new foundation. Honey supers are added to avoid a crowded brood nest.**

Another factor that must be considered if one expects a honey crop:

**Location.....**

Location has always been a factor for beekeepers looking for honey crops. Urban areas usually can support hives of honey bees but rural areas provide vast honey plant sources. Not all bee yard locations are equal! At the end of this article, I will share some photographs to help explain why some beekeepers move hives from location to location.

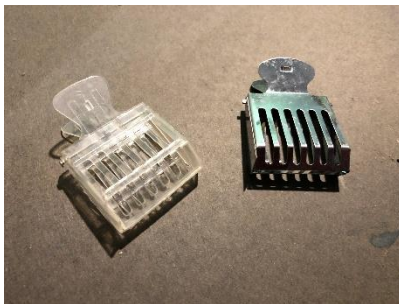
I have noticed this week that a few beekeepers are reporting problems with bees started in nucleus hives. The common perception is that it is better to start beekeeping if you are new to the hobby with a nucleus hive. I generally can support that idea.

Some management techniques with a nucleus hive are required by a beekeeper. Some nucleus hives can fail! If you are going to start beekeeping with a "nuc starter hive", remember bee management of the bees will be on an accelerated rate. In other words, one needs to understand population growth within the hive requires more advance beekeeping skills which will include how to deal with swarming, robbing, adding supers and queen failures. Don't think that queens in nucs are superior to package bee queens especially if the queens in the nuc are 2021 queens. Overwintered nucs with last year queens raised in the fall will be superior.

**For this week, I am running into the issue of how to find the queen.** It can be a challenge for even experienced beekeepers to find queens. It is an interesting game of hide and seek when looking for the queen.

**My system of finding a queen requires little use of smoke.** Just a little smoke at the entrance and a little drifting smoke across the top bars of the frames is required. Taking top covers and inner covers off the hive should be done with the utmost care. Remember, the interior of a hive is dark and exposing the interior of the hive to light may cause bees to become alarmed. Heavy smoking will cause the bees to run and thus, making it almost impossible to find the queen.

A laying queen is much easier to find if the colony is not greatly alarmed. She is also easier to find if she is marked. This year queens are being marked white. If new at beekeeping, it is best to buy a marked queen rather than trying to mark a queen if it has never been done previously. If one wants to learn the skill of picking up a queen, one might practice with drones and then work down to worker bees. Gloves are out of the question for picking up any bee. I will follow up with these techniques in future articles.



Remember no hive should have frames removed from it during cold weather. Frames removed from hives can be placed in a frame holder sold for the purpose of avoiding placing frames on the ground or leaning them against the side of a hive.

Another piece of equipment to buy is a queen catcher. It will avoid injuring the queen if the object of your search is to remove her from a frame.

## Finding the queen in a hive

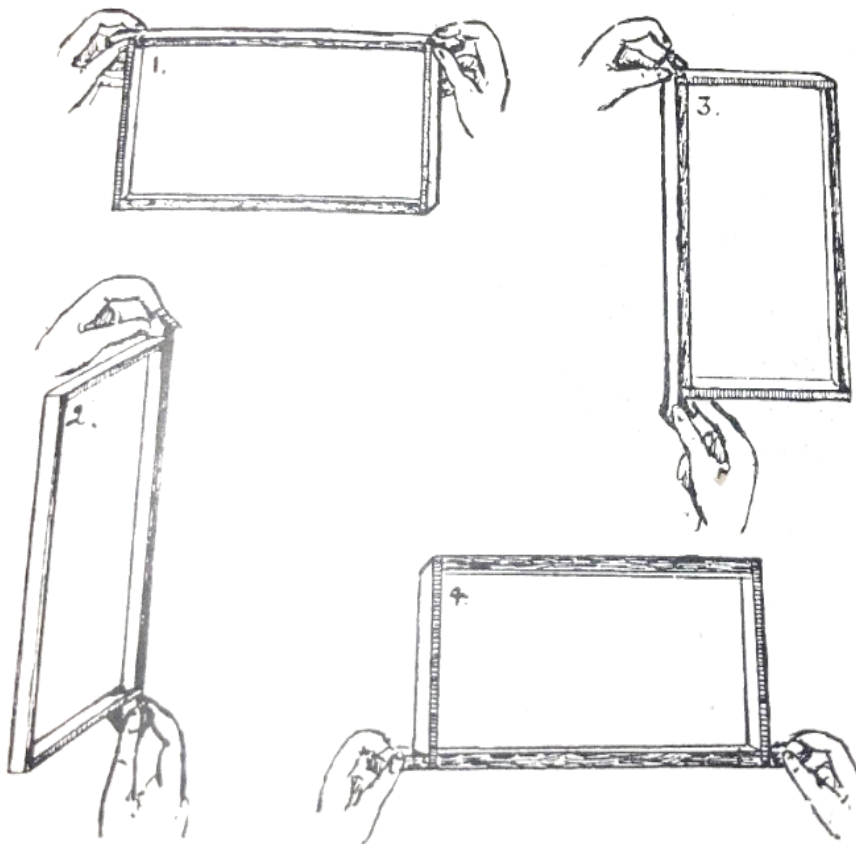
As frames are being removed from a hive, I like to start removing the first frame up against the sidewall nearest to me.

With one frame removed (often the queen will not be on outside frames), I move to the next frame and free it gently with my hive tool. Again, I am not going to be jerking or thumping frames.

Handling frames:

When looking for a queen it is good to be able to turn a frame just taken out of the hive in the manner shown below.

It is best to hold frames by the top bar ear. This will allow turning the comb so both sides of the frame can be observed as well as checking the top bar and bottom bar areas.



I first hold a frame as shown (1). Slowly, I glance at the edges of the frame in a circular motion moving my eye sight toward the middle of the frame. Steps 2, 3 and 4 follow. Remember that queens try to avoid light and may begin to move to the shadow side of the frame.

This drawing is from J.G. Digges "The Practical Bee Guide" 1928

With each frame I take out of the hive, I look especially for eggs. I know the queen should be located on the frames containing eggs and larvae. It is less likely that she will be on a frame of capped brood unless new bees are emerging from cells on that frame. If the hive is crowded, she will be looking for cells in which to lay eggs. One other thought, hold the frame over the



hive – in the event that she drops off the frame, she will drop safely back into her hive.

If the bees begin to run – make a lot of noise and move about, close the hive and wait an hour before trying to find the queen again.

**It is extracting time for some beekeepers.**

**A frequently asked question is: "When can I get the honey out of the comb?"**

This is a frame of honey in the comb. A general rule is that a frame with honey 2/3 capped over cells can be extracted.

Honey bees cap over cells with wax. This prevents moisture from causing the honey in the cells to ferment.

Generally speaking, honey should have a moisture content less than 18%.

Capped honey is called ripe honey!

Taking honey from a comb before it is capped over is a good way to end up with fermented honey. Fermentation



is caused by yeast organisms and if you are not making **meade** (honey wine) it is best avoided when you want good sweet honey. The best way is to wait until honey is ripe.

Fermented honey is sour tasting, and one will see small bubbles in jars. In fact, the gasses released in the fermentation process can cause containers of fermented honey to leak or burst.

The moisture content of honey can be measured. Buying a refractometer can give one a real reading of the moisture content of honey but they are a bit on the expensive side. The easy way to get an idea of moisture content in a bottle of honey is to turn it upside down and watch how fast the bubble in the jar rises. If it rises quickly – the moisture content in the honey is high. If the bubble rises slowly the moisture content of the honey is low. Keep in mind that the temperature of the honey is a factor because cold honey will always be sluggish.

One of the more expensive items in the beekeepers inventory is a honey extractor. Many bee clubs have extractors available for new beekeepers to use. (This is another good reason to join a local bee club!)

Honey should be kept in sealed containers after being removed from comb. The reason:

**Honey is hygroscopic – it absorbs moisture!**

**This picture below was taken April 18 at 4:36 p.m. in Franklin County, North Carolina.**



Bee forage like this can produce great crops of honey . This crop was in bloom for three weeks – mid April until early May. It appeared to be a member of the Brassica family. (field mustard-wild turnip family).

Bee hives in easy flying distance of a field like this will be well provided with nectar and pollen for about three weeks. What happens when the flowers on this field no longer are supplying the hives near it with pollen and nectar?

Answer: The beekeeper managing bees for honey will move the bees to another area with good prospects for gathering more honey.

Most of us do not have fields in bloom like this. Thus, we will be getting wild flower honey.

One strong hive with an outstanding queen can provide you with enough honey for the entire year. Several can provide a person with much more!

One such hive in my backyard will eventually become a cell building hive for raising queens but right now it's job is to produce honey.



Note this hive has a deep super for the brood chamber on the bottom board, but also has a deep super on top under the top cover. Both boxes contain brood. Every box is full of bees.

This is the Demaree system of beekeeping to maximize the amount of honey a hive can produce and reduce swarming. I am bottom suppering this hive. The boxes in between the top and bottom boxes are all honey supers. This type of hive management requires a lot of labor. Note: this hive is not on a hive stand. To work the hive requires the top deep super to be removed every time I do something inside the hive. When I add another honey super, I will need a step ladder to reach that top box.

This hive will produce well over 150 pounds of honey for me by the time the honey flow here in North Raleigh is over in early June.

Good Olde North Raleigh honey!