

# Stahlman beekeeping notes for 2021

## #5 Issue: 1-31-21 Winter work

**We all knew it!** I woke up this morning with snow on the ground. Yesterday, I was working on building equipment – mostly getting ready for March. The thought came to me that it is nice to have a shed to store my equipment and a place where I can saw wood and pound nails.

My shed is small – 12 x 12 and right at the 144 square foot space allowed in our neighborhood HOA. One can not raise pigs or chickens but bees are permitted. I use it to store all kinds of bee equipment. So yesterday was not only a day to work but also clean up and inventory "stuff" I had on hand.

Thus, I can share some things about beekeeping that needed to be taken care of. First, I began checking supers I had stored and have been meaning to repair. During the bee season, I spot frames that should be replaced. I usually place them in a super in an outside side position so when it comes time during winter to replace them, they are easy to spot. I also had some boxes with new frames that I need to put foundation in as well as some already with foundation.

I had an interesting day. I found I was very successful raising a few families of mice. I am planning to raise some queens this summer and had some nucleus hives with new foundation ready to go. So, I can share with you some issues I had.

Mice found my stash of new comb just ready for queen rearing this summer. They had built very warm comfortable nests in my nucleus hive boxes.





This is a picture of a mouse nest! The mice gathered up strands of plastic rope and tarps I had stored in the shed. I have a tarp that has a nice hole in it. This nest occupied three full frames and almost no wax in the five frames was usable. In addition, to the damage done to the wax foundation, the frames in one corner of the box were stained with urine. The boxes with the nests smelled to high heaven of urine.

When I moved the nuc boxes, I had mice running everywhere. Anyone somewhat skittish about mice would have a field day of dogging them.



This nest had at least 10 mice in it. I got wise when I found the first box with mice in it and moved the boxes outside to pull frames.

The most disgusting thing about the clean up was the smell. Mice don't leave a box to go to the bathroom. They go to one end of the box and as shown here, urinate on frames and

bottom board.

A small shed is not a place to bring this equipment back to store it.

I removed all wax from frames to melt down later but guess what – the frames are still [outside] airing out. In fact, I don't see myself using the frames stained like you see here.

What could I have done to prevent this?

- Close the entrance to each of these boxes.
- Fortunately, they did not do this to stored supers with drawn comb. But the lesson is, not only do we need to put entrance guards on our hives outside to prevent mice from spending the winter inside with the bees but protect what we store inside as well.
- I am now putting out bait. Those mice that escaped – they went under my shed and I am sure they need to rebuild the nests I destroyed.



I set out to pull old comb frames from my hives and replace those frames with frames of new foundation. Below is an example of an old frame to be recycled. For new beekeepers, nice pretty frames come to look like this over time. This frame is at least 10 to 20 years old. Notice the comb in the frame is not straight and the cells are not in neat rows. At some point in its history, maybe a mouse got to it and chewed out a portion of the wax that was originally in the frame. The bees usually replace damaged comb by building drone cells and that can be clearly seen in this picture. [Over all - the cells in a frame like this] provide little for a queen to develop a solid brood pattern. In fact, this frame should have been removed long ago.



#### **What can be done with a frame like this?**

- The wax can be recovered from it – This frame could be placed in a solar wax melter.
- It could be put into a bait hive to attract a swarm. Old comb is good for this. It will attract wax moth as well.
- Put it in the trash to be haul away? (old comb such as this might contain AFB spores – it could end up in a land fill where someone's

bees will find it – thus spreading the disease.

- Burn it? Use it as a fire starter! Small chunks of comb burn hot and help a fire get started. I don't recommend burning a pile of old comb – even frames with some wax on it. Imaging a giant blow torch – if done don't do it where power lines are above the fire.

I am looking ahead five weeks – I mention this because I am looking at equipment needs for mid-March and the packages of bees I have ordered. Judi and I will be making a short vacation trip to Georgia to get them. We will pick up the packages on our way back to North Carolina. Look forward to notes I will be sharing about traveling with some package bees and queens.

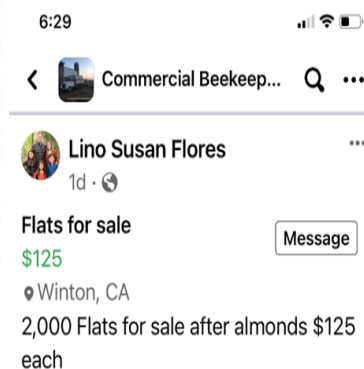
**Bees are on the move to California for almond pollination.** If you know nothing about this annual migration of bees, the almond growers in California are paying big money in pollination fees. There always seems to be a shortage of bees required for good pollination. I was asked how much bee keepers get for pollinating almonds. This is what Google returned:



Here's what almond growers reported they're paying for bees this year: - Low: \$175. - High: \$220. - Average: \$199. Remember, when it comes to pollination, you get what you pay for. It's best not to go bargain hunting for bees. If you pay a below-average rate, you should expect below-average bees.



I belong to a number of commercial FB groups. These beekeepers taking bees to California are thinking about what to do with hives after pollination is completed.



After pollination they need to move these bees. These hives are loaded with bees. They need food and mite treatment which is also an additional cost. But transportation cost moving bees from and to California is very expensive. Selling bees is one way to get pollination money and a way to avoid additional cost.

A commercial beekeeper can not survive unless they find additional sources of money. Honey doesn't cut it. One can also find honey for sale by the barrel on these commercial sites. I see honey prices ranging from \$1.80 to \$2.30 a pound. Commercial beekeepers are sitting on millions of gallons of honey waiting for the price to go up!

Several things I have observed over many years of keeping honey bees.

### Package bees:

There is a great demand for package bees in the spring of the year. In the eastern region of the United States, southern states from Georgia to Texas are the primary producing states for package bees. Queens are generally produced in Florida and the southern part of states touching the Gulf of Mexico. Hawaii also produces early queens.

The demand for queens by those selling package bees is so great that buying individual queens may be difficult. Thus, if you need queens, get your orders in as early as possible.

## Thoughts on both queens and package bees:

### Are you getting drones in your packages?

It is possible to buy packages of bees without drones! However, this is usually not an option. There are several ways commercial package producers shake bees into the container (called a package). The shake consists of a team of men/women working in a commercial bee yard taking bees from a hive and shaking them into the package. Some simply have a team that finds a queen and sets frames of bees outside the hive brood chamber to be transferred to the package. Other don't look for a queen, they smoke bees up thru a queen excluder thus keeping the queen and drones below. It is easy to see which method is used by looking for drones in the package you receive.

### Queens are raised to be caged and placed in the package of bees one buys!

The queen in a package of bees is not related to the worker bees in the package. She may or may not be accepted by the bees in the package. The queen in the queen cage will be usually be accepted by the workers if released from the cage by the worker bees but it takes several days for the bees to release her. Don't get in a hurry and give the queen a helping hand by speeding up the process.

**What you get is what you get!** Once one picks up a package of bees, generally by driving out the sellers drive way, the bees are yours. If a queen is dead in the queen cage, she should be replaced by the seller. Accepting and paying for a package is acceptance of the bees. They are not refundable.

Cost have gone up a lot over the last 20 years for package bees and queens. As I write this I have some Bee Culture Magazines from 2001 in front of me. There were many ads in those magazines for bee packages. They were sold as 2-pound, 3-pound, 4-pound and even 5-pound packages. Many of those selling package bees can no longer be found selling bees today. The industry today is made up primary by big producers -- This sale is being offered now 2021.

East Texas Bee Operation  
Large turn key operation capable of  
15,000 hives  
Housing for owners and up to 20  
workers  
Queen and cell equipment  
Multiple buildings, All weather loading  
pad and acerage included  
Serious inquiries only

15,000 hives may sound like a lot. Little operations are finding it harder and harder to survive. I was in this business and I can say that we had a quota for each worker to meet. A crew does nothing but go out in the morning to find and cage queens.

Another crew gets the bees.

Then everyone is involved in putting cans into cages along with a queen cage. Packages are stapled together for shipment. And yes, there is an office to handle all the paper work.

Packages could be bought with queens of various breeds – Starline, Midnite, Caucasian, Italian, and Carniolan. Also, the price discount for the number of packages and queens were significant.

Notice that bees sold today in packages are listed as # 2 or #3 packages. There was a time when a 3-pound package actually contained 3 pounds of bees. If put on a scale today, many # 3 packages would fail to have 3 pounds of bees.

The weight of bees in the package can easily be determined: Place a package of bees on a scale to get the gross weight.

Then remove the can of syrup and set it aside and weigh it. (This will vary from package to package because the bees are consuming the syrup to stay alive and the amount of syrup in the can will depend on the length of time the bees are in the cage.) The lid that had to be removed to get the can out of the package is placed over the hole to keep bees from coming out.

One tip is to turn the cage upside down when removing the can. Bees will move up into the cage away from the open hole cut for the can. Thus, few bees will escape from the cage. The queen cage is also easy to remove in this position.

Thus, you can weigh the can of syrup and the queen cage with the queen in it before you install the package into a hive.

There are several methods used to install the bees from the cage to a hive. The package and lid can be weighed after the bees are out of the cage.

**So, what is the weight of the bees in the cage when you receive the package of bees?**

Gross weight (starting weight)

Subtract from that weight, the weight of the can of syrup, the queen cage (the queen in this situation is not counted as weight), and then the weight of the cage and the lid.

Note: It is not unusual for the bees to be as much as ½ lb. under the weight from the listed # weight of the package. Since package bees are no longer sold as 2 pound or 3 pound no laws have been broken.

This marketing system developed a dozen years or so ago due to the greater demand for package bees. I compare it to something like the Baby Ruth candy bar. The package stayed the same size but the candy in the package shrunk.