

Stahlman Beekeeping
Notes for 2022
Winter Weather in
March



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Making splits is what I was thinking last Saturday when I published Issue #10.

However weather issues have changed to the possibility of snow and ice in Georgia.

I like to be timely with these notes so I am going to put into this issue an update on what some of us will be facing with package bees this week.

I am picking up package bees in Georgia as this newsletter gets published. I will return to North Carolina with a weather report indicating "Bomb" cyclone [high winds, rain and ice] covering the roads I will be traveling. I learned yesterday that my packages were being shook and would be ready for pick-up Friday afternoon. Anyone with packages to introduce to hives this weekend face some challenges.

The problem: I have all hive equipment set up in bee yards now. That work is done. I should have packages to put into the equipment on Saturday. How long is the cold weather to last? How long can I hold the packages before I install them? Those are questions I am dealing with!

A package of bees



How long can bees remain in a package cage?

Package bees are supplied with a can of syrup. Bees are shook into packages early in the morning to late afternoon and picked up by those transporting them for delivery. It may take 48 hours before the person receiving the package can install them. Sometimes longer!

The bees in the cage will be able to have syrup to eat only as long as it last. Package bees need to be installed into hives ASAP. **When food is not available all the bees will be dead on the bottom of the cage.** The queen may still be alive because her queen cage is supplied with queen cage candy.

Don't make the mistake thinking that the bees can be held for a long period of time. We are talking about the syrup in the can being used up within three or four days.

At one time I produced packages of bees in Georgia and transported them back to Ohio to my customers. I can share a number of horror stories about individuals who for one reason or other felt the bees could survive longer. One customer bought 4 packages of bees and left them in his garage for almost a week before he was ready to put them into hives. He wanted to know what was wrong with "my bees"! Note – he didn't say his bees!

Let me share what I do to hold over package bees.

- I spray the wire screen with sugar syrup both in the morning and afternoon. I don't soak the bees – the spray can be supplied with a simple hand pump bottle.
- The sugar mixture needs to be diluted enough to go thru the nozzle of the spray bottle.
- I place the cages in a cool dark corner of my garage.
- An interesting thing I have learned over the years – bees can survive cold better than heat! Packages do need to be sheltered out of direct cold weather. An unheated garage will work as long as the bees have food.
- Bees will become better acquainted with the queen in the queen cage and queen loss is reduced.
- The down side is some bees will begin to die naturally because they only live for 40 days or so.



It is important to put bees into hives prepared to receive them. During cold weather I do not shake bees onto the top bars of hives as shown here.

Bees can be chilled and it is unnecessary to expose the bees to more stress. Many beekeepers dump bees as shown here. It is quick and works in warm weather.

Cold weather package introduction requires a bit more work. It is important for the bees in the package to retain as much heat as possible.



I generally try to set my hives up to receive a package somewhat as shown here.

The photo with the queen cage placed between frames is okay in warm weather. The bees should leave the cage and release the queen.



But in cold weather - it is best to place the queen cage near the hole in the cage so the bees can leave the cage and keep the queen warm. When released she will move to the frames.



Food must be supplied to the bees in the new hive.

The queen cage should be placed near the inner cover hole when it is placed on the hive. Feeding the remaining syrup in the can is easily done by placing it over the inner cover hole and above the cluster of bees. In fact it would be easier for bees to reach food in a jar over the inner cover hole than using division board feeders which bees must move to. If food is supplied just inches away it may be too far and too cold for the package bees to reach it. It is common for beekeepers using new foundation in hives to have greater losses in cold weather conditions.

Feeding the package bees and their queen in cold weather is important.

There are many feeders sold. Cold weather feeding in my opinion can be challenging for a new beekeeper. I like fondant – A sugar frosting type food rather than a top feeder. Raw granulated sugar can also be used effectively.



The Boardman feeder is not good for winter feeding.

Division board feeders and top feeders with syrup are often out of reach of a cluster of new bees in cold weather. Liquid food also adds moisture to a hive. Moisture collects on the inner cover and falls back on the bees similar to a light rain.

What is Fondant? It is a sugar paste often used as icing for decorating cakes.

I make my own fondant like sugar mixture. I simply take a package of powder sugar put it into a zip lock bag and add corn syrup to it. Not too much corn syrup. I am looking to squeeze the bag (avoids the mess of mixing it by hand) to get a well-mixed dough ball that is not too sticky. This is then placed on the top bars close to the cluster of bees. A 2 pound bag of powder sugar should go a long way for the person with one or two hives. (Honey could be

used in place of the corn syrup but there is a danger of spreading the worst bee disease ever (American foulbrood). I would also add a warning that if the patty is too sticky, the gooey sugar patty will drip down on the bees. This is not good for bees. I use newspaper to wrap the patty so I can handle it and the newspaper prevents any dripping sugar.

The warm weather will return and cold weather feeding can be replaced with liquid sugar syrup which is easier to use.

March beekeeping techniques can be summed up well:

Inspections are mandatory! Even in northern states some warm days will allow for a top cover to be removed from a hive and a quick check of the honey stores made by pulling a few outside frames. Bees may be clustered – at least the bees are alive but don't pull frames of brood in cold weather conditions.

- There is still danger opening hives and inspecting frames on cold days.
- A hive with a good population of bees and a good queen will rapidly deplete honey stores.
- Once native pollen is available, a hive will fill open cells reducing the number of cells for the queen to place eggs.
- Many beekeepers are eager to make splits. Early splits are subject to some very cold days. Finding mated queens could be a problem. Bees returning to the mother hive from nucs reduce the bee population in the nuc causing chilled brood. (This is a good reason to move new nucs some two miles or more from the mother hives immediately after nucs are made up.)
- Early virgin queens may face a lack of drone population to mate well.
- Bees seen flying into and out of a hive is not a sign that the hive is alive and well. (They could well be robbing bees).
- The following management skills and manipulations of a bee hive in March are required by a beekeeper.
 - Early inspections for hive conditions and food.
 - Feed bees where required. (sugar syrup or dry sugar)
 - Inspect hives for mite levels – this should also be done with package bees and nucs being bought from suppliers. Sugar roll test is recommended because it will not kill the bees being tested.
 - Install packages [many new beekeepers are getting package bees to install on new foundation] -- Getting package bees during cold weather is a challenge. Nucs should be okay.
 - Reverse brood boxes on survival hives if the bee population is mostly concentrated in the top box.
 - Check for drone populations and possible queen cells. Swarming is a problem in the south well before swarming begins in the north.

- Last week I wrote about a vertical split. It has an advantage over other methods of making splits in cold weather conditions.

Check on bees weekly. Spring management requires more attention than late summer management. I am not sure of any 100% effective swarm control method. But a beekeeper can quickly be overcome with many issues involving population growth at this time of the year.

If a serious problem is recognized – larva cream colored or dark brown could be disease; contact your state bee inspectors. If you lack the knowledge to find out the reason for the off colored brood, don't ignore the issue. If a bee inspector is not available, contact a bee club in your area. They likely have individuals who can help.

Some beekeepers are covering hives right now much like some are protecting plants from the expected 20 °F weather forecast for Saturday and Sunday here in the south. I do not see anything wrong with this. Northern beekeepers have used hive blankets or wrapped hives in black tar paper for cold weather conditions.

High winds are expected. Make sure hive covers are secured! Next week I am seeing high temperatures returning which is very good.

If you get a package of bees this weekend, I would suggest holding the package until Monday. It should be kept in a cool place – a lot better than a warm room. Over-heated bees in a package make a lot of noise and rush around on the inside of the cage. This causes greater stress on the bees than a quiet well-formed cluster around the queen cage. Feed the bees! You could brush sugar water on the screen with a paint brush as an alternative to spraying sugar water on the sides of the cage.