

# **Stahlman Beekeeping Notes for 2022**

## **Fall Has Arrived**

**Wax moth warning & feeding fondant**



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I returned from Scotland to be greeted by 90° plus temperature and a record 98°F yesterday to a reasonable 70°F today (9-23-22). I was rather getting accustomed to getting up in the morning and putting on a coat in Scotland. Afternoon temperatures generally were in the mid 60's and great weather.

I checked my extracted honey supers and found some wax moth just beginning to work on them. Just a heads up: Check your stored comb. Once the temperatures fall we can relax a bit on worrying about the damage wax moths can do!

**We are now into fall management:**

**Check hives! Some will be weak, some strong, some queenless. I don't like robbing honey from strong hives but this is the time to do it to feed hives judged able to make it thru winter.**

**I give up on queenless hives. In my case, I combine queenless hives with strong hives without any newspaper. This will take care of any laying worker bees real fast. Later I will again re-evaluate each hive to determine its chance for success to winter over.**

**It is not the number of hives I keep that makes me happy. It is the number of live hives I have when spring rolls around. Strong hives in the spring can be split and the hive equipment from the hives I either combine with other hives or store can be then be put to good use.**

**It is important to know if the mite treatments you used worked! I used Apivar and I still have a mite problem. There is time – in fact, an ideal time to use either Formic Pro or Oxalic Acid.**

**Feeding bees may be on your agenda:**

**I have a formula for making Fondant – there are many out there you can find:**

**Fondant is sugar soft and easy for bees to use. It is mixed with air to make it lite and soft – unlike some of the sugar board formulas.**

**Here is a recipe I can recommend:**

**What you will need: (1) A pot & cover – depending on how much fondant you want to make – to hold ingredients and will allow the pot to be heated on a stove to boiling temperatures.**

- (2) A cooking thermometer
- (3) An Electric mixer -- just makes the job easier when air is added to the mixture.
- (4) Shallow pans to let the fondant set up.
- (5) Wax paper to wrap fondant and prevent sticking of blocks of fondant.

Materials to make Fondant to feed one hive - (a small batch) Amounts that are larger can be made by increasing each batch using the following ratios.

4 cups of granulated sugar    1 cup water    1 tablespoon white vinegar

How to go about making the Fondant:

- (1) Pour granulated sugar, water, and white vinegar into the selected pot/pan. Make sure the pot is large enough to prevent the contents from boiling over!
- (2) Cover and boil the solution for 5 minutes.
- (3) Take off the lid and check the liquid temperature every 5 to 10 minutes. As the temperature of the solution increases the lid can be removed completely
- (4) Continue heating the pot. If the pot's temperature reaches 234 °F it will be time to remove the pot from the heat and allow to cool to 200° F.
- (5) **This step is critical. Hot water and sugar is hazardous at these temperatures. Do not pour liquid into glass containers.**
- (6) Whip the mixture and check the solution until the mixture begins to turn white and creamy.
- (7) Pour carefully into shallow pans and when it cools and sets up, one can spread wax paper on a firm surface and turn the pans over. The fondant will slip out of the pans easily if the pan has some cooking oil wiped on it prior to being filled.
- (8) Fondant can also be pressed so that it flattens out if the pan was too deep.
- (9) I generally put a pancake size fondant cake protected by the wax paper above the top bar of frames. I use my hive tool to make a few slits in the cake so the bee can easily move up thru the wax paper. Bees will chew the paper. Since fondant can be quite soft, if it gets hot without the wax paper, it will ooze between the top bar spaces causing some problems with the bees below.

If you plan on keeping fondant for any length of time, keep it in a cool dry location. I put mine in a freezer. I let it warm before putting it on the bees.

It is a good idea to feed your bees to keep the queen laying eggs even if they have stored a good amount of honey or syrup. I know that some queens reduce laying now that fall has arrived. That is normal but I have found that brood in a hive at this time is important for hive

survival. Many of the bees observed in a hive are older bees and as they die, the bee population declines – sometimes rapidly. A good young population of bees is the key to successful wintering – Almost every book I read agrees!

A lot of insulation placed around a hive to keep the bees warm is often rewarded with a hive dying over winter. There are two basic problems with insulating hives:

- 1) When a warm winter day would allow for winter cleansing flights the insulation works to keep the heat from alerting the bees, it is safe to fly. Thus, they miss the opportunity to fly when they should!
- 2) The reverse is also a problem, the cluster generates heat. Too much heat may encourage the bees to try to fly. This could result in disaster on a chilly or cold day. Bees leaving the hive are chilled and flight muscles freeze up. Bees can be seen lying on the ground around the hive in large numbers. It is very apparent if snow covers the ground. One interesting thing beekeepers have observed:

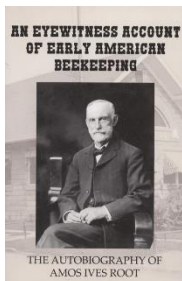
Honey bees picked up off the snow and moved to a warm location can be revived. Some think the bee was dead and they brought it back to life! No such thing – Bees that are dead can not be revived.

Commercial beekeepers and some hobby beekeepers keep bees in a storage building for the winter season. The temperature in these structures is kept between 30 to 45°. Clustered bees use far less honey stores than hives subject to temperature swings during the winter season.

If you would like to read about how they used to do it in the old days -- Read some of the older bee books about boxes for packing bees, moving bees into cellars, chaff hives, burying hives, or as A.I Root tried – build a small building to hold them over during winter including providing a pot belly stove to help keep them warm! Check why below!

References: A.J. Cook Manual of the Apiary

C.C. Miller Fifty Years Among The Bees



A.I. Root An Eyewitness Account of Early American Beekeeping: The Autobiography of A.I. Root.

This book is still available as a reprint. Check out the A.I. Root Bee Culture Book offerings.

“Why would a pot belly stove kill the bees?” It warmed up his little building and the bees inside decided to fly out the entrances open to the outside and died. It was a failure he was not about to repeat.