

## *Apis m. Esoteria 11*

### **Wax Building**

A side mission of syrup feeding is to pull comb. This may be necessary for a package of bees, expanding a nuc, pulling replacement frames for your established hives, or swarm management.

Remember, it takes about 8 pounds of honey to make one pound of wax. I think it takes about 7# of 2-1 syrup or 14# of sugar to make one pound of honey. It can take a whopping amount of syrup to make several hives full of comb.

If you are trying to maximize honey production, you might want to force bees to draw comb before the main nectar flow. Draw the honey super combs early with syrup instead of wasting honey nectar to make wax. This can be added work and space in the hive to discourage swarming.

First you must have lots of bees. When you look at a frame outside the brood area you want to have shoulder to shoulder bees. As they fill the open comb with honey, they will start drawing new comb for the next storage areas. If you don't have enough bees and syrup to make honey, they won't make wax. You can't force the bees until they are ready.

Once the comb is pulled the bees will fill it with syrup honey. Some of this honey can be left next to the brood for food as the brood area continues to expand. You want the frames of new drawn comb for new honey storage or brood expansion. Just before the nectar flow, move any honey super frames that have syrup honey in them, 100 ft. or more from the apiary. This will reduce the chance of robbing other hives. Foraging bees will clean out the syrup honey leaving clean comb for new nectar honey when they are replaced into the hive. This syrup honey will be brought back to the hive and placed in the brood frames. Replace the frames that you removed with frames of foundation.

The bees will use the syrup honey robbed out of the frames to feed brood. They store it near the brood or draw new comb. Any nectar honey will be mixed with the moved syrup honey and used as brood food or wax.

As the nectar flow starts, new nectar honey will be used to finish off the wax and then fill the honey super comb with pure nectar honey. Storing honey is the lowest priority for incoming nectar (feeding larvae is priority), hence, you have very little chance of mixing syrup and nectar in your stored honey.

When the syrup wax combs which are out in the field get emptied, place them in the hive where you need them. These new combs can replace your brown wax comb or expand nucs.

If you want to pull honey super comb you can use the same technique. The bees won't draw honey super comb until the hive body is full of brood and food. I use this technique after the main nectar flow to make honey frames for next year.

Pulling new comb requires so many bees it is a good tool for swarm management. Pull out some side frames in the brood area and place a honey super frame with foundation against the brood box side. Since this location (sometimes) is only used for honey and pollen, the bees will draw the wax, and the queen won't lay eggs in it. Take it out of the brood chamber before the bees draw bur comb on the bottom edge and replace it with another honey frame or a brood frame.

Since it takes 8 times more work to make wax instead of honey and more bees, the bees will stay busy and not be so inclined to swarm.