

Drawn Comb VS New Foundation During Honey Flow

Every beekeeper wants "drawn comb" in their hives at nectar flow time. Drawn comb is simply comb that is ready for either honey/pollen storage or ready for brood. Now days, you can purchase drawn combs made of plastic such as "Supercell". Sometimes we also here the term "fully drawn" meaning combs that extend to the full depth of the frame, so that we can separate them from those combs NOT fully built out. If you want your bees to build combs, either you must feed your bees sugar syrup or there must be a nectar flow going on. The most simple way to get combs is to feed the bees 1:1 syrup. The sooner you start feeding, the sooner comb will be made. It is important to regulate the amount of syrup that is eaten by the bees. This done by blocking some holes or areas of the feeder or not putting many holes in a jar feeder (the lid). You want to feed but not over feed.

If you have found yourself during a nectar flow without drawn combs available, what do you do? You of course have two choices.

1. Use fully drawn plastic frames such as Supercell.
2. Install new foundation.
3. The other is to install frames with wax guides or triangle starters such as used in top bar hives, for the bees to build comb on.

Below is the procedure that may help you when you use new foundation.

Rule #1: Fill any new super or brood box with frames. Do not use 9 or 8 frames in a 10 frame box. What ever size you have, fill it. Otherwise the bees will draw the comb weird.

If your hive is over crowded or you intend to replace the queen use the following instructions:

1. Find the OLD queen and transfer the frame she is on PLUS most (NOT ALL) of the frames that contain brood and all the adhering bees into a new hive body with a super of new foundation on top of that, and set this ("new colony") on a new stand and feed it 1:1 sugar syrup. The older foraging bees attached to these combs that you have transferred will go out to forage but return to the old colony by "habit". The result is that your "new colony" consists of your old queen, some brood, and the non-foraging nurse bees who will feed the brood larva and draw foundation because of the sugar syrup feed and the incoming nectar.
2. The old hive will make a new queen from the brood remaining if you have left young eggs and cells in the old hive or you can purchase a new queen and install it.
3. Your old hive should be a brood box and a new super of new foundation. Many may say this is a mistake as the foraging bees will not make comb. Your goal is to scent the foundation and make it ready for the emerging new bees. Time is not on your side as the flow has already started.
4. Monitor both hives. When you have 6 frames of filled honey rearrange the frames so that you have 3 frames honey, 4 frames of new foundation (in the center) and then 3 frames of honey on the other side. Traditionally, drawn frames where use up to 20 years. Many beekeepers are changing combs on a three year cycle now. Some beekeepers will not use ready made foundation for fear of pesticides in the wax. Are they wrong? I do not think they should be as concerned as they are, but I do not think they are necessarily wrong either.

If you take old dark combs and carefully cut the cells in half, you can see the cocoon that is made inside the cell. You might note that the cell floor has the greatest thickness and increases over time (plugging). The cell walls regardless of age varies little. The bees keep the cells walls groomed. The thought that

old cells make smaller bees is only true due to the depth, but even that has limits. It is this thickening of the cell floor that adds strength to the comb and additional protection to the brood.

The cocoon liner protects the brood from any contamination of the cell wall wax. The brood are never in contact with the comb wax until they emerge, as the cell caps are made by the current bees and is fresh with each generation.

Given their choice, bees will always pick older combs over fresh combs. New foundation is quickly covered by cell wall wax made from your bees. The floor of the cell (where the foundation is) is covered by the cocoon from the first generation. If you fear the introduction of pesticides, the best practice is to first limit their use by yourself. Second try getting your neighbors and politicians to limit their use. Thirdly, place you apiary in a area where chemicals are used less. And of course if you still think changing out your combs helps, change them, but don't kid yourself in believing that something that looks bad to you, is bad to the bees. Bees do not eat old wax, that is one thing that wax moths do well. Make comb replacements based upon insect invasions, damage and plugging.