

Producing a Frame of Honey (Not Ling)

A frame of honeycomb is the fundamental form of honey, and the presentation requiring the least processing and equipment to produce. In light of this one would predict that the honey frame classes would be the most popular class at a honey show but this is seldom the case.

Why might this be the case? The surface area of a frame is relatively large meaning the likelihood of the colony producing a large piece of homogenous honeycomb free from pollen, bee bread, other honey fractions, defects and with perfect cappings is low. With so much to potentially disorder the frame one might think a good example of a frame honey is beyond their capabilities.

However, there are some methods that may be used to improve your chances of nursing that perfect frame into existence.

Wax requires Bees

Producing honeycomb requires wax. You will need a strong colony of bees and in particular young bees who have a strong desire to draw wax. Wax requires a strong pollen flow for nutrition and nectar for energy and so we are focussing our attention to those parts of the season with strong flows.

Same Honey throughout the Frame

The criteria of honey shows requires that the capped honey to be the same (i.e colour and aroma) throughout the frame. This necessitates tuning the colony to be ready to work when the strong nectar flows begin. This tends to be when profuse nectar secreting plants are active - Late May (Sycamore) and mid July (Lime) flow.

Is it a Frame suitable for Extraction?

If the schedule says the frame should be suitable for extraction then the frame will require those characteristics that make it - 'easy to extract with a honey spinner'. The frame must be wired, and the honey judge is also ideally looking for fat frames that have honeycomb bulging beyond the wood work - these frames are the easiest to uncap with the single swoop of a knife. Preference is also given for a frame made out of drone cells which stimulates a larger volume of honey to be stored in the frame than if it were made solely from worker cells. One can purchase drone foundation to do this.

If the schedule does not mention a frame suitable for extraction you can present a frame intended to be eaten as a full frame of honeycomb. Therefore you must use thin (unwired) foundation or none at all, and in this case worker cells are preferred.

Getting the bees to make Fat Frames

Once the bees have drawn the frames out and begin filling them with nectar bring the frames down from 10 to 8 spreading them out equally within the super. The extra distance will encourage the bees to close the gap, drawing the cells out beyond the woodwork of the frames.

Capping The Frame

Not all colonies produce neat, uniform and very white cappings (the capping colour also varies with pollen flow). This is a genetic trait and prior knowledge of which colonies possess this ability is essential to the whole operation.

Pollen, Bee Bread and Pollen Staining

For most people the first super normally contains a large quantity of pollen stores and bee bread. This is because the first super intersects the top of the ellipsoid that defines the nest of the colony. In other words your first super is really part of the brood chamber. For this reason the first super is unlikely to yield a quality frame for a honey show and doing so would also remove valuable pollen stores from the colony.

It is from the second super upwards that an ideal frame may be harvested. Once most of the second super is drawn and filling you can take out two frames to allow the bees to fatten the frames. If you check regularly you can extract a fully capped frame just as it is made and then quickly add a 3rd super to give much needed space.

Alternatively, add a 3rd super once the second super is mostly filled. Once this is done however, bees will begin travelling up and down through the second super leading eventually to a yellow stain on the surface of the comb from all the bee pollen spread by bees feet. This may be a small price to pay for reducing congestion and staving off swarming.

Peckish Bees

As alluded to earlier, it is best to remove a fully capped frame as soon as it is ready and store it. Leaving a frame on as the flow slows down or ceases runs the risk of the frame cappings being perforated by hungry bees wanting a quick fix. Significant damage will downgrade the exhibit.

Braula and Wax Moth

Check the frame has no signs of Braula or wax moth damage. If you suspect possible eggs in the comb place in a freezer for 2 days to kill any eggs that maybe present.

Safe Transport of Frames

The biggest danger now is safe transport. Especially of fat frames which are likely to collide and rupture cappings. One option is to use a super or nuc box for transport with wide plastic spacers attached to the frame lugs. I would avoid using castellated spacers as they tend to be machined too tight for the lugs and can leave an unsightly cut in the lugs.

Cleaning up the Frame

Once you have the frame safely at home you can use a sharp knife to remove burr comb, propolis, and other stains from the wood surface and give a precise and careful scrub to make the woodwork as presentable as possible

A Presentation Case

Full frame presentation cases are available from beekeeping stores. These are sold without the glass and so you will need to bring the case down to your favourite glazer to have two panes cut for the case. It is advised to let the case air once the plastic wrapper is removed to allow the smell of the wood to dissipate before placing the frame inside.

Storage

Store in a sealed container to ensure no bugs or vermin can gain access to the frame. For long term storage keeping in a freezer will preserve the quality of the honeycomb. In some rare cases the act of freezing and thawing may cause the cappings to split so have more than one frame available.

Crystallisation

The honey in the cells must be liquid at the honey show. The act of freezing will reduce the time it takes for crystallisation to occur. In general avoid storing at temperatures near 14C which is the optimum temperature for crystallisation.

If the frame does crystallise you can use a warming cabinet to gently warm the frame back to contain liquid honey.

best of luck

Gino