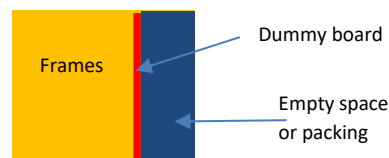




Bailey comb change

This is best started as early as you can in spring – **March** is good but as every year is different a good guide would be when you see that the bees have been flying consistently for a while and are taking in pollen. The basic principle of the procedure is that you put a clean brood box with frames of foundation on top of the existing one and when the bees have moved up into it sufficiently with the queen, you place a QE between the two boxes. This keeps the queen upstairs so she can't lay any new eggs down below. Any brood in the bottom box will hatch out in around 3 or 4 weeks, so then this box can be taken away leaving your bees in a clean box with freshly drawn combs.

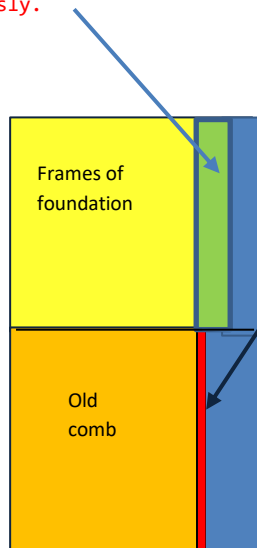
- In March the nest area is unlikely to be filling out the whole of the brood box, so you can remove any unused frames from the outside edges. Obviously don't take out brood – just empty combs or even ones with unused ivy honey or mouldy pollen. Use a dummy board to close this area.



- Then place the clean box on top of this one so that it mirrors the arrangement above. Please see diagram at the end of this bit of writing.
- **Feed with winter strength sugar syrup or Ambrosia.** I would always feed regardless. The reason for using a dummy board to create a compact nest area is that you are aiming for the bees to move up onto fresh comb and not to expand widthways to fill up the comb which you will eventually ditch.
- To keep the top box in line with the bottom one, you could use another dummy board or you could use a frame feeder filled with thick sugar syrup or an inverted sugar syrup such as Invertbee or Ambrosia. This kills two birds.
- When the bees have drawn out some of the foundation in the upper box and there is a nice little population of bees up there, find the queen and place her upstairs on some drawn comb. Use a queen catcher if you feel nervous about handling her.
- Put a queen excluder between the two boxes, thus trapping the queen in the upper chamber.
- After three weeks (four if there was any drone brood), remove the old brood chamber. The brood will have hatched and the comb can then be rendered to

recover the beeswax. You will need to shake or brush off any lingering bees. Do this into the clean box, or on a temporary ramp in front of the hive entrance.

Keep the feeder topped up with syrup as they will need this food to be able to create wax combs. This frame feeder also acts as a dummy. The bees will move up into the new box if you feed them copiously.

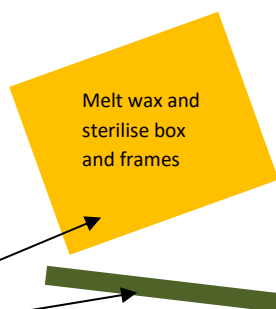


Dummy them up so that they can't use the food to expand sideways towards the edge of the old bottom box. When you have some drawn comb up there and some bees you can find the queen from the bottom box and manually move her up

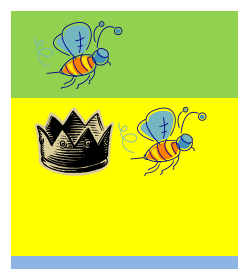
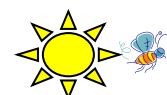
She may be already up there! Then insert the queen excluder between the two boxes.

Some of the nurse bees will stay below to continue brood care as long as it is needed but gradually this will all hatch out

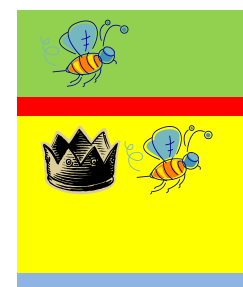
As the bees establish in the top box you can add more frames of foundation and take out the frame feeder or move it along. Add a super as they need it. Once you are at this stage you can stop feeding.



ALL CLEAN!



or



Occasionally during this process you may get something odd happening which may surprise or confuse you. This has happened to us and to others.....

A queen cell or two may appear in the bottom box after the queen has been confined to the top box by the QE ! What's that all about?

Lets think this through for a moment.

- Why do the bees instigate queen cells?
- Are they going to swarm?
- What other procedure do the bees use to try to replace their queen?

It is, unlikely if you are doing this in March, that the bees are going to have the reserves to swarm.

They start to make queen cells when the levels of queen pheromone they are receiving are not enough to inhibit them from doing so. Making queen cells is a default activity for them which is inhibited by a combination of pheromones received from the queen. Some of the queen pheromones are "walked around the comb" from her feet known as the tarsal glands. She is no longer wandering around downstairs because of the queen excluder which she can't pass through. This small dip in the total amount of queen pheromone being disseminated in the bottom box can be enough for the bees to start trying to replace her. The queen will continue to go about her business in the top box whilst down in the bottom box a new virgin may get born and fly out to mate. So now you may have two queens!

What to do?

When this happened to us we let the bees decide which of their queens they wanted to keep. They chose their old queen and the new one just seemed to disappear. Just because she is new doesn't mean to say that she is better!

What it's probably best not to do

Personally I wouldn't split the colony. You have kind of induced a supersedure situation by restricting where the queen can go. This technique is actually used in some queen rearing methods where you don't dequeen a colony in order to get them to raise queen cells.

The bees will be used to both queens as they will be using both boxes. They make keep the two queens for a while but generally they will choose which to keep by feeding her copiously and virtually ignoring and starving the one which they don't want.

When you take the bottom box away you will need to brush or shake any residual bees from the frames either onto a ramp leading up to the hive entrance or into the box itself.