

Inspection 6. 26 Jul 23

Colony 1 (the original colony). More success. The bees had started to make comb on the new Zest frame. This was the next important stage of the colony's development and transition onto the Zest hive from the National frames. Our aim now should be to prepare the colony to overwinter on 6 Zest frames. As part of the ongoing transition, we removed a wooden national frame full of honey and replaced it with a second Zest frame for the bees to start building upon. The honey frame was stored in the middle of the Zest hive, between the two colonies, where there are no bees and which acts as a frame store and honey larder. The frame feeder was empty (again with no drowned bees due to the netting) so we filled it with more 1:1 syrup. Finally, the Queen was spotted and had her red marking reapplied as it was falling off.



Comb drawn on Zest frame

Colony 2. Surprise!!! We were expecting to find a hatched Queen Cell and possibly sight the new virgin Queen. However, while we found the hatched Queen Cell, we also found a fully mated Queen, complete with a Red mark indicating she was born this year! The colony was bequeathed to the Zest hive from a Nuc that was originally for sale, but the Queen had disappeared. It appears the Queen was just good at hiding and has settled into the Zest hive. A conundrum to be sorted now is why the bees were making new Queen Cells while the Queen was present, and what had happened to the now hatched incumbents? Maybe the bees were not happy with the Red marked Queen? We knocked down the now empty Queen Cells to see if the bees would make any more or if they were accepting of the Queen in her new surroundings.

During the inspection we observed eggs and brood at all stages, but the bees appeared hungry and were not finding the internal feeder that we placed in the hive last week. We decided to move the feeder to directly under the bees; having placed some grass in the feeder to prevent bees (particularly the Queen) drowning should they fall in. Additionally, we placed some pollen feed onto the frames to help. We agreed that following the success of Colony 1, we should purchase a frame feeder for colony 2. Finally, we inserted a couple of Zest frames to start this colony's transition from Nationals to Zest frames.



Feeder under the frames



Pollen feed



Additional Zest frames

Addendum. 28 Jul 23

Having been informed that the new frame feeder was delivered to the apiary, we decided to feed **Colony 2** early, rather than wait until the following Wednesday. On opening the hive, the bees appeared really relaxed and were making a gentle sing-song hum. We noted that the pollen that had been placed a couple of days before was half eaten and that the internal feeder on the bottom of the hive was completely empty. Moreover, we also saw that the bees had started to build comb on the new Zest frames that we had inserted only 2 days before. We inserted the new frame feeder with 1:1 syrup; having inserted some additional netting into the feeder to act as a scramble net should any bees fall of the floating raft, that comes with the feeder, into the syrup.



New comb on Colony 1 Zest frame

A quick inspection of **Colony 1** noted that their feeder was half empty and that they had started to build comb onto the new second Zest frame. We decided to leave them get on with business until next week.



Comb on both Zest frames



Half empty feeder

Inspection 7. 1 Aug 23

This was planned to be a quick inspection and feed on the Tuesday afternoon rather than on the traditional Wednesday morning, due to impending forecast poor weather.

Colony 1 (the original colony). The bees had finished the feeder as we had predicted. A look through the frames allowed us to see their progress with making comb on the Zest frames which they were filling with honey. Pleasingly, they had nearly filled a section of the second frame. We were able to find the Queen and view brood at all stages. The bees seemed a little fussy or busy, but this may have been due to robbers or the weather. We filled the frame feeder and inserted another Zest frame for them to fill. Next time we would hope to see the middle sections of the Zest frames being filled and could consider removing a National frame beyond a Queen excluder to reduce the dependency on National frames.



Colony 1 filling its Zest Frames

Colony 2. These bees were much more peaceful than colony 1 (there goes the robber/weather theory). The frame feeder was empty and all of the pollen pack eaten; so we filled the frame feeder with 1:1 syrup as planned. We had a quick look through the frames and while we identified eggs and larvae, we did not see the Queen who has proven to be quite elusive in the past (remember we were unsure there was a Queen until the previous inspection).



Empty frame feeder and pollen pack

The bees had made two crumpet sized pieces of comb on their Zest frame. We noted that an outer National frame was drawn but did not have any stores or brood on it so, as part of Zest transition, we decided to remove it and inserted a third Zest frame so that frames alternate between Nationals and Zests. On some frames we have had to put spacer clips on the Zest frames as the neighbouring wooden frames are not all Hoffman frames and have their own spacers. This difference in frame and spacer types has the potential to cause bee-space issues. Too much space and the bees may not make comb and will have an additional void to keep warm or will make thicker comb for stores. Too little space and the bees may consider it too small to make comb or will stick the frame together with

its neighbour. We should avoid bee-space issues once we are converted to all Zest frames which have a tab on the top to ensure adequate bee-space for brood comb and an optional spacer if you want comb for honey.



Crumpet-sized comb