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Queen Excluders by: Steve Victors

Queen excluders can be a very useful item in the tool list of a beekeeper. Like all tools there are different ways to use them and the results of how they have been used can have the beekeeper praise them or curse at them. I have had fairly good success with them and I thought that I would try to pass along my observations on how I have used them and information that I have picked up on how others have used them.

One of the first remarks that I heard about the queen excluder was in fact that it acted more as a honey excluder than anything else. “Bees don’t like them and they won’t go through them”. Well they will – but it is extra work for them and they won’t do it unless there is a reason.

I first used them out of necessity to keep two failing hives from completely dieing. I didn’t particularly care if the bees didn’t go through them, I wanted the heat from the lower brood box to warm the upper box and keep the upper nest alive. It did and in the process I learned enough about excluders to make me believe they are good tools to have around.

I have spent a fair bit of time watching bees go through excluders and have made some general observations that I thought that I would share with the group. First is that the openings are pretty small and the bees for the most part have to work a bit to go through them. I spent a number of years working as a laborer and always resented anything that added extra work to my day. Imagine having a turnstile at the entrance of each room in your house or a door that was just wide enough to wiggle through. I certainly wouldn’t wander around the house as freely as I normally do and I expect you wouldn’t either. The point that I am making is that one shouldn’t just put an excluder on the hive just because that is the way a complete hive is shown in the book. There has to be a purpose in it that outweighs the restricted movement in the hive. The bees also have to realize that there is a need to go through the excluder so it is common practice to bait the area with a couple frames of honey above the excluder to draw them up. Another strategy is to let them start working in the super before you place the excluder under them.

I use the excluder to keep queens separated within the hive since I run a two-queen hive. I have never seen queens fight through a single excluder although I think that it is possible for them to do so.

According to the books there are a number of alternatives to excluders. A super of honey is said to keep the queen in the lower box as she is programmed not to go wandering in the pantry looking for a place to lay eggs. I think that if there is ample room for her in the brood chamber this is even more likely. The act of reversing supers keeps the queen with lots of holes to fill so that may play a part as well.

Placing an excluder on the hive so that it leaves the sides and the last frames (number 1 and 10) unobstructed is also said to work. The theory is that the queen uses the center of the nest and is unlikely to find her way up if she has to travel to the edge of the hive (even though I have seen her there).

I guess the logical alternative to queen excluders is not to use one at all, which is probably what most beekeepers do. If the object is to keep brood from the honey supers at harvest, placing the queen in a cage 3 weeks prior to harvest is certainly a workable plan and no excluder is necessary.

I have used a couple of types of excluders and have noticed a difference between them all that is worth mentioning.

The wood framed metal ones are good and sturdy. They don't flex bend or sag. I use them in the spring to set my feeder jars on and the bees then have a proper space between the top bars and the feeder jar. The bees seem to have to work a bit harder to get through the spaces when used between supers. The nice feature of the wood frame is that they can be used to provide an extra entrance above the brood chamber by sliding the honey super back enough to let the bees come back from the field and get in above the excluder. They hold up well to the hive tool. After harvest they can be used for any number of uses in the honey processing from a drain rack for glassware to holding the wax cake over the drip bucket. They work for bread in the kitchen and to hold the Christmas cookies as well. I also have a ten-rack smokehouse that does a great job.

I also have some plastic excluders that I think highly of. They are made with round rods and the bees have very little trouble getting through them. I would say that they pass bees at least twice the rate as the metal ones. The plastic ones that I have don't have a frame and are quite flexible. This is likely their greatest disadvantage. When they sag in the middle the place where the excluder touches the top bars tends to get propolized down. The first time I removed one in this condition the excluder bent quite a bit before the propolis gave way and when it did I launched a handful of bees at my face as the excluder snapped back. It was pretty exciting for a few moments. Since that time I have twisted them off and haven't had many problems. I have also taken to placing a small twig on the top bars to keep

the sag out. I have noticed that the supers slide more with the plastic excluder than the wood frame one which may also be a disadvantage.

Here are a couple more things to think about when using an excluder:

Remember which side was down so that if the queen is on the excluder, she is not put on the wrong side of the excluder when it is placed back on the hive.

Rust on an excluder can shred wings and also be careful when you scrape burr comb off the excluder that you don't make a rough surface.

In conclusion, excluders can be great tools but they have their quirks and drawbacks to them. Don't be afraid to use them when they are needed but try to keep away from when they are not necessary. You will increase the efficiency of your hive and that generally means more honey in the jar.