

Barry's Bees

Preserving Bees for Our Future



MAY NEWS LETTER

Topics for this News Letter.

The Swarm, swarming its control using splits. Mating queens and jobs to complete in May

As the days start to lengthen and the hive activity increases, swarming and species survival will be on the bees mind. Swarming is a natural strategy that the bees employ to ensure their species survival. Swarming occurs for many different reasons within the colony. Expansion, failing queen, hunger, lack of room, predation, the list goes on. But the one sure thing the beekeeper can count on is the process the bees adopt to achieve this. The colony will always prepare several (up to 18+) queen cells for the queen to lay in. The old queen will slow down laying in preparation for leaving. Her abdomen shrinks over several days and when the conditions are right the colony will swarm - taking the old queen and 2/3rd of the colony with them on their departure. As the virgins hatch, they will either seek each other out to kill each of the rivals until only one remains or swarm themselves, taking with them a small amount of bees at each swarming.

By understanding this process the beekeeper can plan ahead and be prepared. Sufficient space within the colony is vital so consider splits, or start a new Nuc and control the process yourself rather than lose the bees.



Above – Emergency queen cell. The bees are getting restless



Left – An abundance of swarm cells underneath emerging brood.

This colony could very quickly swarm itself out, if not checked and corrected.

Right – A nice supercedure cell and one for a split.



The Swarm:- There are many different types of swarm However, for the purpose of the news-letter we will deal with just two. These are two types of conventional swarm, a prime swarm and a cast swarm.

The prime swarm is normally headed by the old queen and about 2/3rds of the bees from the hive. They form a large rugby shaped sphere and will settle anywhere between 2 - 20 ft from the ground. They are generally easy to retrieve and the bees are happy to settle where the queen is as her pheromones are still strong even though she has reduced her laying.

A cast swarm is normally headed by a single or sometimes multiple virgin queens. They form a much smaller football shaped sphere and the more the colony swarms the smaller each cast from that colony becomes. They can be temperamental to retrieve because the virgins are flighty, have no distinctive strong pheromone and therefore the bees are less reluctant to settle.



Left – A very nice prime swarm, easy to remove and rehome from the small tree.

Right – The first of a cast swarm another easy retrieve however, potentially a tricky rehome with the virgin queen.



Swarm Control using splits:- Once you have identified the potential of swarming within your colony, do something about it or you will lose the bees.

I tend to use splits to control swarming. This involves you establishing up to two or three new colonies from the existing one that is about to swarm. This is achieved by working methodically through the hive inspecting every frame for queen cells. Once completed, I select just 2-3 cells preferably on separate frames and destroy all the rest. Taking the frames with a single queen cell on, I then make up two or three, 3-2 frame nucs using the frames of capped brood and emerging brood from the original hive to achieve this. The order being, 1 x frame with queen cell, 1 x frame with brood, 1 x frame with brood/ lava and food if it was to make up 2 nucs or two frames of brood 1 with the queen cell to make up 3 nucs.

So I have taken from the original hive a total of 6 frames of bees. I replace these frames with frames of foundation and then close up the remaining 4 frames of brood and the original queen. I reduce the hive entrance, close up the hive and leave them. After about 3 days all the flying bees from the 2 new nucs would have returned to their original hive. The remaining brood will have started to hatch and then I feed them. The queen returns to laying and the colony believe they have swarmed.

The nucs are closed up and left, with me feeding them after 2 to 3 days. This prevents the flying bees from the original hive returning to rob them out. The young bees hatch along with the virgin queen, she goes on her mating flights and returns to the nuc to start a new colony and begin laying. She will need more room quite quickly. To aid the colony I try to put them next to each other to share warmth. This way I keep all the bees and get two new queens and potentially the colonies as well if it goes to plan.

Mating Virgin Queens:- This can be quite difficult to achieve as the mortality rate can be high. There are several things that can go wrong, disturbance and predation being the two most common problems. Being too keen to get into your newly established nucs to check on the progress is a sure way to disturb the virgin/newly mated queen, she could take flight or abscond. So show a degree of restraint and wait a good period of time before looking in the nuc- 15 -21 days should be ok.

If you have a lot of swallows, house martins or swifts these will take their toll on some of your queens eventually. Predation is not common, but does occur and it's not just on the wing this happens. Opportunist birds will pick off the queens should they end up on the ground.

Having a good drone pool is essential to ensuring your drones mate with the queen and not wild stock. It's part of the drones DNA that will make up the next generation of young bees and their behaviour. Nice drones nice workers! There is also the queen to consider as well, how old was the mother and what stock has she come from?

Allow the queen time to mate, get into a good laying pattern and develop strong pheromones of her own. The introduction of a mated queen is generally easier than that of a virgin queen. Queen cell splits are a great tool to swarm control. If it goes wrong and the queen does not mate, then simply reunite the bees!



Jobs to Complete in May

1. Conduct early summer inspection of the colony to confirm it's overall health, the queen is laying and producing workers and the colony is expanding as it should also look at their food reserves. Record your findings on a hive record card. Consider the use of pollen substitute on slightly weaker colony's to help them expand. Look at what old frames are present and need replacing and ensure they are moved toward the edges of the brood nest or hive.
2. If brood is present and the colony is showing signs of expanding, treat for varroa. Remember to record types of treatment given, serial and batch numbers. Ensure there is no evidence the hive is getting ready to swarm, swarm or queen cells. Provide them with room to continue to expand as they will need it! If cells are present consider doing a split, but don't be too hasty with this.
3. If the weather is looking favourable move the brood body to a screened varroa floor and move the two hives to the outer edge of the hive stand if used. Consider the addition of a honey super or two as the OSR (Oil Seed Rape) will be under way and good nectar flows will follow
4. If you have overwintered on solid floors ensure they are treated and cleaned prior to storage. If considering splits, ensure you have sufficient new frames with foundation to replace the old. Ensure you have swarm catching equipment ready at hand or loaded in the car! They will occur as the weather warms and daylight hours get longer.

Its Queen rearing and honey harvest time!!