

Tips for Introducing queens by Amanda Millar June 2013

Now is the time when we have queens available for requeening colonies which have inferior queens or failing queens especially following last year's poor mating weather.

Everyone will have their own favourite method and many methods will work some of the time. To reduce the risks of failure here are some tips culled from my own experience and from more experienced beekeepers.

Avoid introducing a queen of one strain to bees of another strain (Italian queen to European Black is the most difficult).
Avoid introducing a queen if the colony is being attacked by robbers; if it is trying to swarm; if the colony is hungry; if the colony already has a queen – or a supersedure queen lurking in there. If the colony has drone laying workers they will almost certainly kill her. If the colony has queen cells they will usually prefer their own cells (genetically related) rather than a strange queen. It is more difficult if the bees are old.

Likelihood of success increases if the colony is given some syrup 2-3 days before the introduction especially if you think they do not have many stores. Feed light syrup until she is established and laying if there is no nectar flow. If the bees are old give a frame of capped brood and young bees a day or two before (dust them all with icing sugar to gain acceptance).

If you give the bees what they expect they are more likely to accept her. For example if they had a mated queen, then replace with a mated queen. If they had a virgin, then a mated queen or virgin will be accepted. If they had queen cells, then a virgin or mated queen are good. But if they had a mated queen and you give them a queen cell or a virgin soon after they will know something is not right and may replace her with emergency cells. If you cannot give them what they expect, it might be better to allow them to become hopelessly queenless then they are more likely to accept anything remotely queen-like. To do this, remove the old queen, allow them to make emergency cells and 5 or 6 days later remove all the cells. They will now have no eggs or larvae of a suitable age to make more queen cells. Then introduce your cell, virgin or mated queen. If your queen is newly mated but has been laying for 3 weeks even better as her queen pheromones are stronger.

If the old queen is removed and a new mated queen introduced between 30 and 120 minutes later they will probably accept her more readily than a couple of days later when they are making queen cells.

A small colony will accept a new queen more easily than a strong stock. Introductions before May or after July (providing no supersedure queen is lurking) are generally more successful. Between May and August or if the colony is large it is better to introduce the queen to a nucleus and when settled merge that with the main (dequeened) colony using newspaper. This is also a good idea if the mated queen is tired from traveling or has been out of a colony for a while and stopped laying. When merging a queen-right colony with a queenless one it is often better to put the queen-right one on top to delay the discovery of the queen and increase the chances of a gentle acceptance.

Regarding the actual introduction; some people 'run them in with smoke' but you need to understand the state of the colony and it is not without risk. Better to use a queen cage. In cages both virgins and queens survive better if they have a few young bees with them to look after them however these attendants must be removed before introducing the queen to a colony. If the colony is feisty put her in a plastic cage with the end sealed (and fondant) and leave her for a couple of days to allow them to get used to her, then break off the end of the cage (ensuring the fondant is still soft) and allow them to release her. Put the cage between the frames in the middle of the brood area where the young bees are likely to be and where they expect the queen to be. Old bees remember their old queen and are less friendly.

Summary

Not if swarming,
robbing,
hungry,
queen present,
queen cells present,
supersedure queen present,
drone laying workers present
different strain of bee,
bees are old.

Do - feed before and after,
give young bees,
give them what they expect
remove any queen cells
before May, after July
use nucleus if large colony
use queen cage

There, simple isn't it?