

South Tipperary Beekeepers' Association

Fact Sheet no. 12

Simple Nuclei increase for the beginner

Nuclei production is very important especially for beginners now that we are suffering an increased incidence of winter losses caused by many reasons ranging from poor queen mating due to the unfavorable summers, the increased effects of Varroa and the viruses they carry, or poor apiary management by the beekeeper. We all need to produce more nuclei and full colonies to replace losses. The literature provides numerous ways of producing nuclei and full colonies from the artificial swarm to the Vince Cook method of nucleus production. However, both of these require a lot of effort and extra equipment. The following outline is about simple increase.

Firstly, when you are doing your regular swarm control inspections during the summer you can make up nuclei by using the following method:

- 1. All queens must be clipped and marked. This is the basis for good swarm control.
- 2. Having found that your colony has started swarm preparations i.e. unsealed Queen cells; break them down for the first time.
- 3. Return after nine days and check again. If the colony has raised further cells; Find the queen, one of the advantages of clipping and marking, and take her out in a three frame nucleus consisting of one frame of brood, stores and pollen respectively.
- 4. Leave a good open queen cell in the parent hive, mark the frame and breakdown the rest. Come back 7 days later and break down any new queen cells.



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This method is time dependent and it is better to perform during June. If it is carried out in May, there is a chance that you will weaken the colony so much that it will not recover for this year's honey flow. Alternatively you can take the frames of stores and pollen from two other strong, disease free hives in the apiary; only take the brood and bees from the swarming colony. You must remember that this hive will not have a laying queen for the next three weeks.

The nucleus should be taken three miles from the original apiary and not placed in the vicinity of full colonies as it is susceptible to robbing, due to its weak status. If it requires feeding, it is better to take frames of stores from strong colonies and feed these colonies as they would be in a better position to defend their home. If the queen in this colony is only one year old she will be suitable to head this colony into the winter. If she is more than one year old it would be better to replace her with a new queen, never allow a nucleus to raise its own queen

If this is carried out in May when the new queen is hatched you can give a frame or two of sealed brood from other hives in the apiary. This has a twofold benefit: firstly, it will build up the colony that has no laying queen and secondly it will bring the new queen into lay sooner. It will also weaken the stronger colony thereby reducing problems with swarming. It will give you the opportunity to introduce frames of foundation satisfying the colonies needs to draw wax. If on the other hand the colony starts swarming in mid-June you can take your complete nucleus from the swarming colony. This should curtail their swarming impulse and you can be assured that there will be no decrease in your honey returns, as any egg laid after the 15th June will not gather honey for you this season (Three weeks from egg to hatching and three weeks from hatching to foraging).