## **Basic technique for making up a nuclei**

- Open colony quietly
- Find q and place in match box with 3-4 bees
- Examine brood frames and those containing emerging brood are selected and placed in nucleus box to the number required i.e. 4 frames for a 4 frame nucleus. If nuc is to be taken away all bees are left on the frames and a further 2 frames are shaken in
- Close box for immediate removal to new site
- At new site open box allow bees to fly then gently smoke and transfer to full b/c
- Once transferred introduce q in butler cage
- Add 4 frames of foundation and feed 5 l syrup
- Close up and leave for 6 days.
- If the nucleus is to stay in the home apiary the frames should be slightly shaken over the brood chamber to remove the older bees before being put into nuc box.
- Shake 4 more frames of bees slightly over brood chamber and then the remainder bees into the nuc.
- Place nuc in its permanent position with entrance closed with grass. The queen is introduced and a frame of foundation added.
- The main difference between home nuclei and out apiary are
- The effort made not to introduce old bees
- The extra bees added to allow for those that return home
- The fact that you don't feed for 6 days

The reason it is not fed straight away is that the older bees may carry the message back that syrup is available and the parent colony could rob out the nuc.

Therefore when making such a nuc make sure it has enough food for 6 days Syrup cannot be given until all the old bees have gone home and by then the queen will be established.

The grass stuffed in the entrance will alert the foragers that their location has changed. Nucs made up for sale should have at least 1 frame of stores as you do not know what will happen after they leave the apiary. Also it would be better to use the old q in the nuc.

Any colony which has lost a nuc will loose some of its potential for honey production

How much will depend on size of nuc Time of year Availability of nectar

Several colonies can be used for making up a nuc.

Nuc made in June with 1 frame of brood and 1 frame of stores and bees with a young laying queen will build up to a full colony by winter.

Swarming colonies can be broken up into this size nuc each given a ripe queen cell and although build up will be slower as no brood will be produced for about a month as the queen is mated and laying. After that they build up quickly and should be adequate for overwintering, can be supplemented with a frame of brood or two.

## Uses of nuclei

**Queen mating** – nuc can vary in size from Apidea with a cup full of bees to a 5 frame nuc. Brood prevents absconding.

How long should nuc b left q less possibilities are

Leave q less for 2 hours then introduce q cell gives a high rate of acceptance.

Leave q less for 7 days then destroy emergency cell before introducing q cell gives 100% success.

Make up a nuc especially for mating leave q less for 2 days then introduce q cell 100% success.

**Establishing and building into full colony:** Ideal way for beginner to start by obtaining an over wintered nuc in Mar April and building into full colony which should yield a surplus in its first year. Nucs made in June with current year's queen won't yield

**Increasing stocks and replacing colonies** – Over wintered nucs are ideal replacing winter losses and will provide a surplus during the year of replacement. If stocks are to be increased then they should be made up during May/June when queen can be reared and colonies are strong enough to provide bees.

**Swarm control-** removing bees and brood from strong colonies is an efficient effective method of swarm prevention by reducing the colony population. If q cells are present they may be used bearing in mind you may be propagating from undesirable strains.

**Keep spare q and breeder q** - Spare q should be over wintered in case of emergency when you cannot rear a replacement in early spring Breeder q life can be extended by keeping her in a nuc and thereby severely reduce her egg laying. Q can be kept for up to 5 years this way.

**Requeening large colonies** – during the active season swarming foraging it is almost impossible to introduce a queen into a large stock. Making up a nuc from the colony and first introduce the young q for a week then reunite the colony and the nuc.

Assessing the queens off springs

Drawing worker comb

**Observation hives**.