

SECTION 5 – HOW TO ATTRACT THE BEES

Any prepared hive must be clean – no dirt, spiders, cobwebs or insects that might capture a scout bee and prevent it returning to fetch the swarm.

Catching a swarm with a bait hive

Using bait hives to catch swarms is a traditional part of rural life in much of Africa. If a swarm is looking for a new home then why not provide a suitable container in which a nest can be established?

Ideal situations for bait hives or 'catcher boxes' are the same as those where an apiary could be set up. In some areas, swarms of bees fly along the same route during the same season each year.

Many bait hives may be a long way from villages and are liable to get damaged or stolen. Therefore, to minimize costs, boxes, baskets or gourds can be used.

If such simple equipment is used then the catcher box must be inspected every few days as a new swarm quickly builds comb and becomes established. It is then difficult to transfer it into a more permanent home.



FIG. 50. A catcher box or nucleus box with top bars or frames the same size as the hive into which the bees will be transferred.

It costs more to build a proper catcher box which would have bars from which the bees could build their comb. These bars should be the same size as those to be found in a permanent hive and this makes transfer easy.

A few small pieces of empty comb taken from an established colony and stuck in the catcher box increases its attraction for a swarm. Rubbing beeswax and/or certain aromatic plants on the inside of bait hives can also make them more attractive. Lemon grass, which contains chemicals similar to the marking pheromones of honey bees, is one such example. The residue of honey, wax and propolis after processing – slumgum – is also very good bait.

Transferring a colony from a wild nest

Wild colonies are another source of bees. In some cases the colony may not be easily accessible but it is essential that combs are taken out without breaking them. These combs are then placed in a bee-proof container and brought near to the new hive. Large areas of brood are carefully removed, trimmed if necessary and tied into the frames or onto the top bars of the new hive. Strips of cloth, string or plant fibres (e.g. strips of dried banana stalk) can be used to hold the brood in place.

When the combs have been removed, the bees still in the nest are smoked so that they walk (not fly) out. The queen is probably still amongst them so much care must be taken. They will cluster outside the nest entrance so that if the frames with tied-in comb are placed close by they will walk over the comb. When most have done so place the comb, covered with bees, into the hive

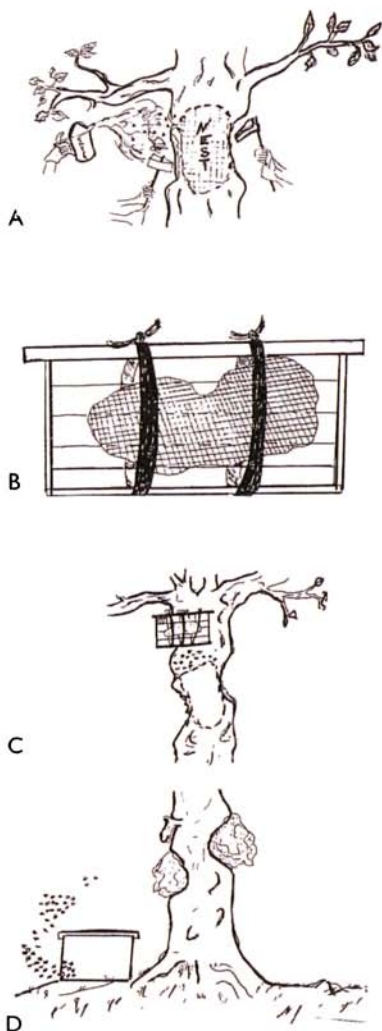


FIG. 51. (A), Colony in a tree is smoked while wood on each side is cut away to give access to the nest; (B), Wired empty frame, or even just a top bar, with a piece of brood comb tied in place; (C), Comb is fixed above the cluster of bees; (D), The colony is transferred to the hive and all the holes and entrances to the nest closed up with rags, sacking or newspapers. (After Bianco 1985)

brood box. If possible, place a frame or two with honey comb in the box as well. Place the box close to the previous nest site so that foraging bees will return to it, but close the entrance to the original nest securely.

The best time to do this task is shortly before sunset. If you can recognize the queen then it is best to capture her in a matchbox and introduce her to the hive when the rest of the transfer is complete. She should be placed close to the brood.

If there is little brood and no food the queen may be tempted to fly away (abscond) taking the colony with her. To prevent this, the hive entrance can be reduced to prevent the queen passing through. A simple method of doing this is to use a 4 mm ($\frac{1}{8}$ inch) paper clip held in position with soft wax (coffee wire with a similar-sized mesh is also effective). This is only a temporary measure and should not be in place for more than a few days. If the bees are unhappy they will fly off and cluster nearby. However, as their queen cannot go with them they will return to the hive. The bees will have accepted their new home when workers return carrying pollen.

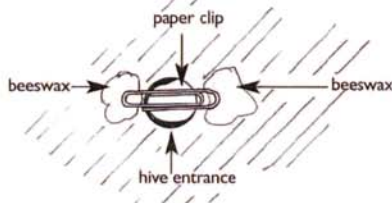


FIG. 52. The use of paper clips with an inside measurement of 4mm as temporary queen inclusions. (After Claus 1991)

Basic management

Once the hive is occupied and the bees are busy, then the following simple guidelines need to be remembered:

- Do not stand in the flight path of the bees.
- Work quietly without excessive talking or drumming noises.
- Work quickly but smoothly. Remove lid carefully and puff smoke gently around the entrance of the hive.
- Remove a few empty bars to create a gap at one end of the hive. This should not disturb the bees. Thereafter, remove one bar at a time. Smoke the gap gently and hold the bar vertically so as not to break off the comb.
- Keep the bars in the same order and try not to squash any bees when replacing them in the hive. Squashed bees release a smell (alarm pheromone) that sets other bees on the attack.
- Do not visit the hive in the warm part of the day – about six o'clock in the evening is a good time.
- Do not try and work with too many hives at any one time. Certainly for not more than 45 minutes in an apiary as bees from the first hive worked on will become agitated and attack which will lead to further commotion amongst all the bees.
- Always wear light coloured clothes. Ideally protective clothing should be worn, especially a veil to protect the eyes and face.
- Make sure the top bars are pushed together as they are replaced, so that no gap exists. Finally, gently replace the lid on the hive.

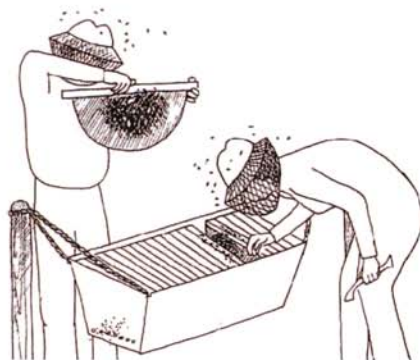


FIG. 53. Opening and working with a top-bar hive.

- Always keep the grass cut and the area around the hives tidy.

True beekeeping only takes place when there is some understanding of the bee and its ways so that predictions can be made about behaviour and management techniques developed.

Beekeeping can be lucrative but it is important that the level of technology used fits in with the local culture and local knowledge. It should be achieved naturally and not through pressure. The technology required is, in comparison with other branches of agriculture, very simple and quite cheap. In most cases it can be generated locally. The main limiting factor is a human one – lack of knowledge. This can be remedied by education and the sharing of information.