

Information Sheet - Shook Swarm Technique

This sheet progresses from that on Integrated Varroa Management.

Purpose:

A method used to reduce the risk of foul brood diseases such as American & European Foul Brood. The respective spores and bacteria of these diseases are usually found in the brood cells and this aims to give the colony new foundation to work on every year or two, helping to maintain healthy brood frames. This technique may also be used, with the consent and instructions of the Regional Bee Inspector, when a minor outbreak of EFB is confirmed.

Secondary Purposes:

To replace the brood combs at the beginning of the season, preferably in April/May during a honey flow and as an alternative to an artificial swarm in April, May & June. This can also reduce varroa very effectively.

Rationale:

To remove any possible reservoir of infection from the colony by removing all brood combs that may contain bacteria. Treatment with anti-biotic for EFB will not necessarily remove all bacteria and therefore the disease can recur.

A colony must be strong enough to withstand a Shook Swarm, ie. At least 6 British standard brood frames of bees and have a satisfactory laying queen. The colony must be able to draw out the foundation and therefore the ideal months are from late April to June.

The beekeeper must have ready for use, clean/sterilised equipment for a new hive. This is your opportunity to give the colony a clean hive to start the season, similar to the hiving of a natural swarm.

Method:

1. Move the colony a short distance from its original position.
2. Place a clean brood chamber with clean frames with foundation, with a clean floor and entrance block, on the original position. Use a queen excluder between the floor and chamber, to prevent the queen from absconding. Find the queen and cage her for safekeeping during this manipulation.
3. Remove approximately 3 central frames of foundation from the new hive.
4. Shake all bees from the original hive into the centre (do this by lowering the frames, one at a time, into the gap and shaking all the bees into the depth of the chamber) and brush any remaining bees.
5. Put the old frames, without bees into a bag for destruction later. In foundation replacement & swarming situations, it is a good idea to put 1 original frame of open brood into the new chamber. (see note below on varroa management)
6. When all old frames have been shaken into the new chamber, replace the 3 frames with foundation gently into place, then carefully release the queen into the brood chamber.
7. Feed the bees with sugar syrup until the foundation is at least 75% draw out. If there is already honey in a super or good nectar flow, feeding may not be necessary, but be careful.
8. In the case of EFB, destroy by burning all old brood frames, immediately. Otherwise the frames may be cleaned, ready for new foundation. Also in the case of EFB, any supers may be required to be burnt, unless the Regional Bee Inspector gives you a license to extract the honey for human consumption only.

For Integrated Varroa Management: All the original sealed brood will have a large numbers of mites within, so destruction is necessary. Return 1 brood frame with eggs or open brood to the brood chamber (varroa mites will be ready to occupy these cells as they are capped.) As soon as the cells are all capped, remove the frame & destroy it, thus removing most of the mites that were on the bees. To reuse the frames, freeze the brood and then clean off the comb and renew the foundation.

Background Information:

The National Bee Unit have researched the shook swarm relative to minor infection of EFB outbreaks and found that recurrence rates are substantially reduced when a shook is used. (4% against 21%). For heavily infected colonies, destruction of the colony and frames is required and the hive parts sterilized by scorching.

Post Note: From recent experience, it is incredible how the colony will recover and produce the usual amount of honey or even more.

Information above has been helped by an article from the BBKA News – April 2002 and personal experience

Prepared by John Hauxwell (up-dated July 2010) Reference from the CSL of the National Bee Unit, fact sheet