

Nucleus - Specification

There have been many definitions for what constitutes a Nucleus, going back to the original British Standard 1372 of 1947 through to the latest advice on FERA's factsheets.

There is also some confusion caused by beekeepers sometimes referring to the container (small 5 frame hive) as a Nucleus rather than the small colony residing on 5 frames.

Suffice to say that in summary a Nucleus colony can comprise of 3 to 5 British Standard (BS) Deep frames of bees with all stages of brood having been laid by a this year's laying queen and sufficient food to allow them to be transported and become settled.

Ideally your Nucleus should be on 5 frames. In Scotland you should avoid getting a 3 frame Nuc after the end of June, a 4 frame perhaps until mid-July. After this time the nucleus should be on 5 fully drawn frames in order to allow it time to build up sufficiently for winter.

If you are on large format hives (Langstroth, British Commercial or Dadant) then the above 3, 4 & 5 BS frames can be translated to 2 up to mid-July and 3 thereafter as the frame sizes are much larger.

Ideally the bees you source should be from your area as bees become acclimatised to their local environment. Use a reputable supplier and don't be afraid to ask for references.

Bees are also supplied in "Packages". A Package is 1.5 to 2 kg of worker bees, a Queen and sugar or candy in a ventilated shipping container. Packages are unusual in the UK and would only be suitable for Scotland if obtained before mid-May by professional beekeepers.

You may also come across "Mini-Nucs" These are essentially very small hives used for queen breeding and only contain a cupful or so of bees. They should NOT be on offer for sale

This specification however deals with Nucleii on full size BS (or larger format) Deep frames.

Specification - A Good 5 BS Deep Frame Nucleus will:

- Have a good quality, young laying queen - ideally from your area
- Have all stages of brood
- Have at least 3 frames with brood
- Be free of signs of disease (ask advice of your local Bee Inspector)
- Have at least 4 frames covered with bees
- Have the equivalent of a full comb of stored honey and half a frame of pollen.

- Have good quality frames and all frames fully drawn out
- Have been examined by a competent person prior to purchase
- Include a statement of what varroa treatments, if any, have been given

Delivery Container

Your nucleus may arrive in a Nucleus hive, in a temporary transportation box (usually plywood with ventilation strips) or if sourced locally, you may collect the five frames in your own hive. If the latter, it is best to deliver your hive with 2 dummies and four frames of foundation to the supplier a few days before collection - he can then install the 5 frame Nucleus of bees ready for you to collect.

Smith Frames/National Frames/Large Format Hives

If your Nucleus arrives on Smith (short lugged-151/2" top bar) frames and you have a National hive (17" top bars), the frames will fit but they will not be located side to side. This can be solved by pushing a map pin into the ends of the top bars (to make them artificially longer).

If your Nucleus arrives on National frames and you have a Smith hive, you will have to cut 19mm (3/4") off each end of the National long lugs. Shake the bees off the frames down into your Smith brood box and shorten the lugs of the cleared frames with a junior hacksaw or similar. Do one frame at a time and put them into the hive so that the bees have frames to climb back up onto.

If your Nucleus arrives on National or Smith frames and you have a large format hive (Langstroth or Commercial), the following action needs to be taken.

Commercial : If small notches (10mm x 4mm deep) are cut in the inner surfaces of the side bars just under the top bar, a Smith frame will slot in.

Langstroth : The combs have to be cut out of the small format frames and inserted in the Langstroth frames and held in place with two wraps of masking tape. If care is taken by removing the wedge bar in the small format frame, the comb can be inserted and the wires trapped with the wedge of the Langstroth frame -also use tape. A Push-pin is best for securing the wedge in this case, again do one frame at a time. The bees will soon secure the combs to the larger frame, but hold the frames vertically when inspecting.

Sourcing bees outside your area

If you "import" bees, (and as stated above, please make all attempts to source local bees), you must be very careful to observe the relevant import rules. These are aimed at controlling the spread of pests and diseases. Guidance is given on FERA's National Bee Unit BeeBase website.