

happens to drone brood which is at the edges of the brood nest. The perfectly formed larvae will turn black and we may well suspect disease. But the colony as a whole is just protecting itself and the dead larvae will be removed and more eggs will be laid once the weather improves.

Colony Strength

NOSEMA

Under normal circumstances, the colony should be starting to build up steadily. If you have more than one colony, it is important to compare them and check that they are all developing at about the same rate.

→ If one colony is considerably weaker than the others, or slower to build up, then you could have what used to be called 'spring dwindle'. If this is the case, check for nosema, an infection which can be a danger at this time of year.

You need to take a sample of about 30 of the older adult bees and, after killing them in the freezer or with ethyl alcohol, grind up their abdomens with a little water. Place a drop of this mix on a glass slide and checked for nosema spores using a compound microscope with x 400 magnification. Most branches now have a microscopist who can help you with this.

→ If nosema is present, then, as soon as it gets a bit warmer,

you can carry out a comb change specially designed for a weak colony. If you are unsure how to do this, have a look on BeeBase (www.nationalbeeunit.com) where the process is described in detail. The disease organisms are likely to be on the comb, so giving the colony fresh, new comb, particularly disinfected drawn comb, will give them a boost. ←

Keeping Records

Checking colony build-up is one of the reasons for keeping accurate colony records. And if you have not kept records before, then spring is a good time to start.

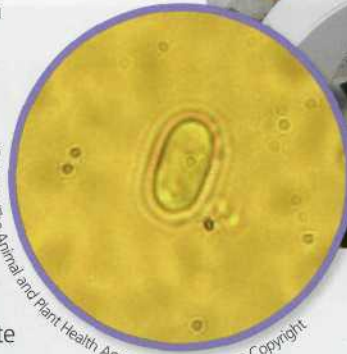
You can buy ready-made record cards from the *Bee Craft* website, but it is also possible to make your own.

In his book, *Guide to Bees & Honey*, Ted Hooper recommends that we check five things every time we examine a colony and we should record these as a minimum. They are:

- Is the queen present and laying? It is not necessary to find the queen. In fact, if we go into the brood box at all in March, we must do so only if the temperature is above about 12 °C – and then only briefly. Please resist the temptation to hunt for the queen. Just check for eggs. If eggs are present, then you know the queen was there within the last day or two.
- Are there enough stores to last the colony until your next visit? At this time of year the weather is changeable and you may not be able to open the



Photo: Richard Rickitt



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Nosema can be a cause of slow colony build-up in the spring. The tiny spores (left) can be identified using a compound microscope. Magnification required x400

hive for a few weeks. And, of course, the bees are using their stores rapidly because they are more active and are feeding the queen and the brood. If you are in doubt about the amount of stores, then you can place a patty of fondant directly on top of the brood frames. Similarly, if there is a shortage of pollen rich plants near the apiary you can feed a pollen patty. The bees will ignore them if there is enough natural forage available.

- Is disease or abnormality present? We have talked about nosema, but don't forget that varroa is still the biggest killer of our bees. The mites have not gone away even if the count is low because they will be reproducing in the sealed brood. If you haven't already done so, put the varroa slider under your hive and check the number of mites that fall over a seven-day period. Then either check the calculator on BeeBase, or look in the NBU's pamphlet on varroa and see if further action is needed. Make a note of the daily average and the total count in your records.

If your brood area looks healthy and there is a good brood pattern, then note how many frames of brood there are and if they are well covered with bees. Move any frames that you wish to replace to the outside, ready for removal when the weather is warm enough for a full inspection.

- Does the colony have sufficient room for the queen to lay? This should not be a problem in March, but check quickly and make a note on your records.
- Finally, a note should be made of swarm preparations. Colonies are unlikely to be making preparations in March and it is not necessary to go through the hive looking for queen cells. But there should be space for a note in your records.

Peace of Mind

In March, all we really want to know is that all is well. That the queen is laying worker brood with few missed cells, that it looks healthy and that there are enough stores for their increasing needs. 🍯

The Bee Craft apilary guide to **Record Keeping**
How to keep records of your bees and their management

Sample record card

Date	Queen present	Frames with eggs	Brood pattern	Food stores	Temperature (°C)	Notes
29 March	Y	3	N, V, 4	1	4	Supper added. Ovaries trace in
15 April	Y	8	N, V, 4	2	5	Five chalk brood. Supper added.
22 April	Y	8	N, V, 4	3	5	Quarantine tray still. Daily milk added. LG
29 May	Y	7	N, V, 4	30	5	2 specimens of Cells. Artificially sealed
27 May	Y	9	N, V, 4	31	4	2 more given to Gail each.
3 June	Y	1	N, V, 4	30	4	

Veterinary Medicines Administration Record

Medicine bought	Batch no.	Exp. date	Date bought	Name & Address of supplier	Date applied	Colony no.