TIMELY ADVICE FROM THE NATIONAL BEE UNIT

Spring Preparation

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t this stage of the year all beekeepers should have prepared their colonies for winter, ensuring they are in a healthy, queenright state, with an adequate supply of young bees and stores.

This is in the belief that colonies will be sustained through to the following spring, which, depending on the weather, can be as early as March, or up until late April. Beekeepers talk about spring checks as if they are the first visits of the year but, with unpredictable weather, it can be perilous to leave your first colony inspection as late as April, especially if the winter has been particularly long and cold. Bees should not be 'put to bed' in autumn and left to their own devices until the following spring; doing so can jeopardise the health of your colonies.

During the months of January to April, there are several tasks that can help carry a colony through to spring successfully.

Using Registered Varroacides to Keep Mite Populations Low

In December and January beekeepers in many European countries, including the UK, treat their bees with generic and naturally occurring substances such as oxalic acid. Oxalic acid is considered a 'winter' treatment



Administering oxalic acid treatment by the trickle method

and can be administered to a colony by different methods of application: in a liquid form with a syringe, or by vaporisation. For many years, wood bleach, which contains oxalic acid crystals, has been added to sugar syrup and trickled between the frame 'seams', or placed directly on a heated pad which is inserted into the colony entrance. This in turn is blocked up to seal in the vapour. Such methods have been passed down as advice, with no real testing having taken place. Beekeepers who are contemplating their use need to be aware that personal protective clothing (such as gloves, face and eye protection, and respiratory protection) may be necessary. In addition, the use of such generic substances could lead to prosecution, should the routine sampling and testing of honey for residues find positive results.

This has led to many beekeepers using the generic substance illegally – whether knowingly or not – because up until now, there has been no registered veterinary medicine for varroa winter treatment. However, under the 'cascade' principle (more information about this can be found in our advisory leaflet Managing Varroa) beekeepers are able to obtain two licensed oxalic acid treatments through a registered veterinary surgeon. Api-Bioxal is a registered veterinary medicine in Italy and Ecoxal is registered in Spain. The active substance for both is oxalic acid dihydrate which should be either mixed with a 1:1 sugar solution when administered by trickling, or placed directly on the vaporiser if being administered by vaporisation. It should be used during broodless periods so is a suitable treatment for the end

of December or early January. Beekeepers should bear in mind that if they choose to use a veterinary medicine, the treatment details on the label must be strictly adhered to. Any deviation from the instructions could lead to colony damage or loss, or in severe cases, damage to the beekeeper's health.

Heft the Hives:

Before administering an oxalic acid treatment check the weight of the colony. This is a good way of obtaining an accurate idea of the food stores present without disturbing the bees too much. If you have more than one hive to heft so much the better; with regular checking and comparison, you will get a good 'feel' for the amount of stores present. Heft both sides of the hive, because one side may feel heavy and give the beekeeper a sense that there are plenty of stores in the colony, while the frames at the other side may be empty.

Check Hives for Isolation Starvation

As you administer an oxalic acid treatment, check the colony is not in danger of isolating itself from food stores. This can happen in colonies where plenty of food is present but the bees are unable to access it because it is blocked from the winter cluster by a few empty frames. When this happens, move frames around so that



Feed fondant and pollen patties in early spring

the frames with stores are next to the cluster and score the cappings of the cells containing stores to stimulate feeding.

During winter, an accumulation of dead bees can build up on the floor board. After you have administered your treatments and checked the food stores it is important that any dead bees are scraped off the floor and removed so that they do not block the entrance and prevent bees exiting for cleansing flights.

Feed Candy or Pollen Substitutes

There is an old beekeepers' saying which encourages us to wish our colonies a Happy Christmas and give the bees a block of candy: 'the bees sing the Lord's praise at midnight'. Any colony that has been fed adequately in autumn should not need a block of candy in December and it should only be used as a last resort where food stores are low. Generally, this will be in late February and early March when stores are reducing, brood rearing and colony activity is increasing, and temperatures are warm enough for some foraging and cleansing flights to take place.

During March, pollen stores become important and encourage brood rearing. To rear brood, a colony will need a mix of honey or sugar and pollen. If colonies are close to early pollen crops, all is well. If they are not, feeding a pollen supplement or substitute will help. Do not assume that there is enough pollen in the brood box; spring shortages can be common. **50**

To provide sufficient depth for pollen supplement/substitute, place a shallow eke on top of the brood chamber.



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