

February checklist

What to do in February

- Check all the hives for damage.
- Check the hives for food, especially if the weather is poor.
- Monitor varroa levels.
- Assess the availability of pollen.
- Check equipment for the season ahead
- Oilseed rape preparations begin now

February can either be really cold and wet or we can have some early warmth. It is very variable and from our bees' point of view it can be a difficult month. The bees are expecting the weather to improve as the day length increases and the queen will have started to increase her laying rate. As the volume of larvae in the nest increases the workers need to expend more energy to preserve the nest temperature. More workers will be needed for this and they will use up the honey stores in the nest. The secondary effect will be that water vapour produced from the metabolism of honey will increase and can condense on the periphery of the nest. If this is allowed to become excessive it will encourage moulds to develop that could eventually kill bees and larvae.

Healthy bees are needed now

February is a very busy time inside the colony, and at the same time the foraging bees will need to be out collecting pollen and nectar to keep the colony well supplied. These are the workers that hatched in the previous autumn; in bee terms they have already lived a long time and they will now be nearing the end of their useful lives. Healthy winter bees should be expected to provision and care for two brood cycles (at least six weeks of house bee work). If these bees are not healthy they will be unable to complete their tasks before they die and the colony will have great difficulty in surviving through to spring. If you did not keep the number of varroa mites in the hive low in 2011 your bees may succumb to a virus infection, and if you did not ensure your bees were free of noseema they will be poorly nourished and the colony will have difficulty in building up as the warmer weather comes long.

Is there enough useable honey stored?

Colonies with plenty of honey stores can die of isolation starvation if the colony is not large and the stores are not near the centre of the brood nest. In cold weather the cluster cannot move far from the nest without threatening the survival of the brood and if the available stores are at the edge of the hive the cluster cannot cover the stores and brood at the same time. Colonies that die from starvation will have thousands of dead bees on the floor and hundreds with their bodies head first in the cells around the dead brood. Bees will have died eating the last drop of available food. Check that there is available food for the colony to prevent this from happening.

Pollen supplement recipe

60% Fat-free soya flour
20% Brewer's yeast
20% Natural pollen from healthy (your own) colonies

Pollen substitute recipe

75% Fat free soya flour
25% Brewer's yeast

Examine your hives thoroughly

As ever, much can be learnt by watching the entrance to the hive on warm sunny days (most years there are a few of these in February). Colonies that are doing well will have many bees flying out to find fresh pollen and to defecate outside the hive. Activity outside weak hives is far less and may not reveal any workers collecting pollen. If you only have one hive it can be difficult to know if a hive is doing well or not. If the weather is warm enough, above 8 °C and sunny without significant wind, it is worth lifting off the roof and peering into the hive through the hole in the crown board (make sure you are wearing a veil). A strong colony will soon have bees coming to the light to find out what is happening whereas a weak colony will seem strangely silent. Secondly, put your hand flat on the crown board. In a weak colony the crown board will feel cool whereas with a strong colony the crown board will feel quite warm above the area where the brood nest is located. If your colony does seem weak, then feed it with candy and hope that it will survive. If it is dying because the bees are not healthy there is probably not much you can do. However, I am aware of an occasion a few years ago when a beekeeping friend explained that her bees were very weak in February and seemed to be fading away. She had not treated the colony with oxalic acid to reduce the number of mites so I suggested she could try this as a 'last ditch' rescue attempt. The colony immediately changed character and did well in the following summer. It just goes to show that winter use of oxalic acid can be beneficial even when not used at the recommended time. I think it worked because the colony was so weak at the time that there was virtually no brood in it and the varroa mites were mainly on the adult bees. Clearing them out gave the adult bees an opportunity to do their intended duties.

Winter preparations are important

Now is the time to prepare for the forthcoming spring. Make sure your spare equipment is clean and ready for use. Once spring comes and the bees become very active the colonies will expand rapidly and, without ready-to-hand equipment for swarm control or clean supers to put on the hives you will find beekeeping a trial. Failure to prepare adequately can mean that you will spend too much time taking temporary measures rather than taking planned actions. In general terms you should have clean brood boxes full of new frames and foundation ready for your preferred method of comb change. February is a good time to plan the work for the year and decide how many queens will be replaced in your apiary, how many colonies you wish to have at the end of the season and how you expect to manage varroa.

Oilseed Rape

If you plan on going to oilseed rape your hives need enough foragers to take advantage of the opportunity. Start feeding at least five weeks before placing your hives there this will give at minimum a good start to the OSR season