April Checklist

Points to ponder

- Do they still need feeding
- Check for disease
- Check for and remove old or damaged frames
- Check for and remove frames with old dark comb
- This month could start the swarming season

April is one of the best months in the year if you keep bees; full of optimism and so long as your colony has survived the winter rigours they will be burgeoning. There is usually plenty of forage with a good variety of pollen to ensure the bees are able to supply a 'balanced' diet for the larvae. In areas where autumn sown rape is available beekeepers will be preparing to take advantage of this bonanza by stimulating the colonies to increase their size in advance of available forage. Feeding with light syrup will encourage the workers to feed the queen more and thus increase her rate of egg-laying. So long as there is plenty of pollen for the colony this is sufficient. Where pollen is lacking pollen patties may need to be supplied to provide the larvae with sufficient protein.

Weather and inspection

Watch the weather and, when there is a warm spell is the time to inspect the colony properly for the first time. This inspection is not just for you to enjoy seeing the bees wandering about in the colony, but is a part of the annual management procedure. The most important lesson for beekeepers is 'never inspect the colony without having a purpose'; it is a hard lesson because we all get pleasure from watching how they manage the colony. Remember that every time you lift the crown board off the hive a rush of air is drawn in from the bottom and the balance of pheromones is lost. This must stress the bees and aggravate them. It is hardly surprising that guard bees leave the hive to find out who is damaging their colony. We then remove the frames, wafting them in the air further cooling the brood, and some of us do not even replace the combs in their original positions. The surfaces of the frames are not flat, even those with wired foundation, so that the gaps left by the bees will be altered if you do not replace the frames in their original positions. Bee space will be reduced in some places and increased in others. The bees will then start making brace comb to fill the gaps and propolise spaces where the bee space is now too small. This is a lot of hard work for the bees; enough to upset the colony and disrupt their balance for some time.

Look at every frame, check for stunted wings

The first major inspection, sometime in April, should be used to ensure that any disease is identified and managed where possible and to ensure the colony is building up as expected. You should look at every frame without any bees on it, so we all need to learn how to shake bees off a frame into the hive body. Once learnt this is not difficult and the technique relies on suddenly changing the direction of movement of the frame. The frame is lowered and then sharply brought up in the gap between other frames in the hive. As the direction of motion changes the bees will continue downward, lose hold of the frame and fall onto the hive floor. When this is done correctly it does not hurt the bees and very few will fly out of the hive. Unless there is a good reason for finding the queen do not look for her but shake her off the frames at the same time —it does not hurt her!

Once a frame is clear of bees it is much easier to inspect the brood for disease. Have a 'poke' at anything that looks abnormal. A more experienced beekeeper will help you recognise the signs of brood disease. Some are easy to detect like chalk brood (loose white 'mummies' in the cells and on the floor of the hive). American Foulbrood (AFB) is a bit more difficult but we should all try to learn how to recognise this (cappings become discoloured, sunken and damp and if a matchstick is poked into the cell the dead larva will be drawn like a rope). Do not forget that AFB is notifiable and if there is the slightest suspicion that you have it contact a better qualified beekeeper or your Appointed Bee Inspector for a definite diagnosis. Others can be far more difficult, such as European Foulbrood (EFB) where all you might see is a few misshapen larvae in unusual positions.

Look at the sealed brood

Look at the sealed brood and see if you can find cappings with little holes in them. This is often a sign of parasitic mite syndrome and can mean that the varroa levels are getting too high. If you see a capping in this state poke a cocktail stick or a matchstick into the cell. If it contains a dead larva it has probably been killed by varroa. You may even find a mite on the larva. Next you can ensure the colony has a queen by looking for eggs in the frames. If your eyesight is poor wear reading glasses and if this is not enough buy an illuminated magnifying glass to help you peer into the base of the cells. It is good to check that the colony is building up well. At this time of year the queen should increase her laying rate and that will mean that the area covered by eggs is more than a quarter of the area covered by sealed brood (eggs persist for three days whereas sealed brood persists for twelve days).

Check every frame thoroughly

Finally check the state of the frames. Old dark frames should be discarded as soon as possible; they probably will contain disease pathogens. Similarly, old misshapen frames, or those with large holes or clogged with solid honey and old pollen, which are rarely used by the bees, should be discarded. The brood chamber should be full of frames that the queen can lay in and with sufficient space to store pollen and honey. As you remove the frames look for stunted bees and those with deformed wings. These are bees damaged by viruses vectored by varroa mites and this is another indication of high varroa levels.

Nosema and Acarine

The last part of your disease inspection is to collect about thirty bees and have them diagnosed for nosema and acarine. You should select old, foraging bees as these diseases are easier to detect in older bees. Foraging bees returning to the hive tend to be more prominent on the frame nearest the entrance. A simple technique for collecting a sample of bees is to run a half open matchbox across the frame. The sample should be placed into the freezer for 2 to 4 hours to kill the bees. In all cases it is important to take action to reduce the effects of any disease found. Brood diseases and nosema are often reduced dramatically or eliminated by giving the colony a cleaned brood box and new frames. There are a number of ways to do this and we will discuss these next month. Giving a colony a clean box with clean frames is a great tonic and while it is disruptive, the bees recover well and generally go on to produce a larger colony and bring in more surplus honey. This inspection is one of the most important in the year and will give you and your bees confidence that all is ready for the coming season

Be alert for signs of swarming later in the month