ABOUT THE APIARY

# Preparing hives to survive winter

*Ricki Leahy*

For us it hasn't been the easiest of beekeeping seasons, and I'm sure quite a few beekeepers would agree that we can put that down to the beastly Antarctic spasms of weather we were so often dished up. The weather did eventually settle in late summer with some nice pastural honey filling the boxes, so as usual, fingers crossed.



*Working the apiary. Photos: Sam Doran.*

## MONITOR FOR VARROA

First—and most important—is to be sure varroa treatments have been successful and that your monitoring confirms that fact. Be aware that hives can easily become reinfested from any neighbouring hives that may still be harbouring varroa within your bees' foraging zone. If you are worried, consider treating with an oxalic acid treatment in late autumn when there is little or no brood in the hive. Oxalic is very effective at this time for ridding the hive of varroa.

## IS IT TOO LATE TO REQUEEN?

In April, for most if not all of us, it's way too late in the season to be raising queens for the simple reason that the drone cycle will be over. But if you still have mated queens available, certainly you could still requeen those potentially viable but 'desperate for a new queen' hives. Any requeening should mostly have been done in February and March, giving the new queen a better chance to breed up some fresh young bees to overwinter with.

But really, the further we get into April, the more reason why any failing hives (which are most unlikely to make it through the coming winter anyway) should be united with another stronger hive. But don't be fooled by the perfectly fine queens that have simply stopped laying for a while. It's just part of the natural way some queens winter down.

## CULL OUT THOSE FAILING HIVES

Some hives could have recently been attacked by wasps or robbed out by other bees. Also, there are those hives that repeatedly failed to accept a new queen, that didn't build up compared to others in the apiary and that you invested so much time on, and still they give you the 'beekeeper's grief'. So, culling is just a tidying-up exercise, deciding to make the most of what resource you can and not taking failing hives through the winter. **Remember, always check for AFB before removing any hive parts.**

If the frames and hiveware are fine to recycle, then find the failing queen, if there is one to be found, and dispatch her by giving her the thumb-and-forefinger treatment. Then, by using a couple of sheets of newspaper, 'paper' the brood box and bees on top of a stronger hive's brood nest, place the queen excluder over this, then add the honey super, if any, on top. No worries if you can't find the queen, just paper it together as the stronger queen will soon hunt her down and kill her. Sometimes worker layers may be causing the trouble. They are renowned to be very hard to find and besides, there may be more than one. Ultimately, it's more satisfying to open up a nice strong hive in spring which could then, at some time, be split back into the two or more hives.

Alternatively, if you don't want to add the brood boxes to other good hives, you could simply tip the bees out in front of its neighbouring hive and remove the dud hive from the apiary. Consider this as an opportunity to cull any gnarly old frames from your outfit. It's a good idea to put any brood boxes through the freezer for two days to rid them of wax moth before winter storage.

Hopefully we beekeepers don't have too many of these troublesome hives, but how do we identify them from a hive that may pull itself together and survive the winter? For any small cluster of bees, provided there is a balance between bees, brood and stores, just keep them nice and cosy in only the space they need. It's no different really to overwintering nucleus hives. They often will overwinter surprisingly

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well if placed in a sheltered, sunny spot. Smaller hives in one box could be placed on top of each other using division boards, sharing the same roof, with an entrance out the back or sides to minimise drift. The hives will benefit from their shared warmth.

In balance, these strategies remove the disappointment and worry of watching feeble hives slowly wither away over winter.

## FIND WARM AND DRY WINTER SITES

Actually, it's also a good time to consider shifting hives out of those cold, shadowy spots which may have been very good through the summer but turn cold and damp during the winter. I always imagine I am sussing out a winter camping site: if it's a spot I would pitch my tent, then the bees will probably like it also. Remember also that to move hives to a site within their three or four kilometres' flying distance, you have to first move the hive further away than that for about three weeks and then back to your intended new position. Otherwise, the bees don't reorientate to their new site and return home to where their hive was, often becoming a nuisance clustering and flying around homelessly. It's possible to lose a lot of bees if you shift hives carelessly. You can, however, move a hive about a metre a day to shift it; for example, across to the sunny side of your lawn.

While on the subject of shifting hives, we had better take heed of the warnings about spraying our apiaries with herbicides. Traces of glyphosate in honey are becoming market issues. Although there is no food safety concern, consumer perceptions are beyond our control. If the broader primary industry observes that beekeepers continue to spray around our apiaries, then they in turn will struggle to make changes to their own practices. A good alternative is to liberally sprinkle agricultural salt around your hives. Try using a 20-litre bucket with a lid to keep the salt dry and an old cup with a handle as a dispenser. We find it works really well but you do have to keep at it. If you scrub-cut the apiary occasionally the lack of growth, due to the salt, directly around the beehives makes that job easier. Salt is cheap and available from any farm supplies store.



*Hard at work beekeeping.*

## HELP YOUR HIVES TO HELP THEMSELVES

Be sure the hive is sitting firmly on the ground with the floor sloping slightly forward to drain. Consider ensuring the safety of your bees by issuing each hive with a hive strap. Wasps and mice (and indeed robbing bees) can still be a nuisance, so it's best to reduce the hive entrances. We use blocks of wood lightly nailed to the floor to hold in place and halve the entrance (and even smaller as per the weakness of the hive). Take off any empty supers or excess honey, being sure to leave ample stores for winter. Set the hive to become snug and if needed, with a syrup feeder so it's already in place so any future feeding is as non-disruptive as possible. These measures encourage the brood nest and bees to cluster close to the entrance, enabling guard bees to be more effective. Be careful not to start any robbing by taking preventative measures such as covering any exposed frames or honey and being attentive towards the bees' behaviour.

If short of stores, feed a more concentrated syrup solution that is easier for the bees to store. Be mindful that it costs the hive in bees (and noticeably so) if too much sugar is fed, especially to a weaker hive. It's best if your hives are generally managed to go into winter with their own honey rather than a supplementary sugar dependence. Honey is the bee's natural food; they manage it better and is an integral and important feature of a healthy hive.



*Below: Hive entrance closed down for winter.*

## THINGS TO DO THIS MONTH

- ☐ Check for varroa.
- ☐ Start preparing hives for winter.
- ☐ Sort out your weakest hives.
- ☐ Place hives in sheltered, sunny sites.
- ☐ Protect your bees from pests.
- ☐ Get your honey analysed for tutin.



*Salt on the ground.*