

Heather Honey.

by Tony Jefferson, Yorkshire.

When writing this article I thought it would be a good idea to explain how we organise our year of beekeeping, in preparation for two weeks of anticipated good weather in August. If you decide to take bees to the heather sufficient preparation needs to be done to maximise the effort involved.



Bell heather (*Erica cinerea*). Photo: Roger Patterson.



Ling heather (*Calluna vulgaris*). Photo: Roger Patterson.

There are basically two types of heather honey; Bell heather (*Erica cinerea*) (my personal favourite) which flowers from July onwards and is a dark coloured, liquid honey which can be extracted normally. Ling heather (*Calluna vulgaris*) flowers later in August and produces thixotropic honey so getting it from the comb to the jar is not straight forward.

Location considerations

When placing bees on the moors, advance reconnaissance is vital to ensure the hives do not pose any problems to the gamekeepers and beaters, and others who may use the land, such as walkers and picnickers. Other important site assessments include the amount of shelter from the wind and the chances of flooding.

The location for placing hives on the moors is known as a heather stance. However, an ideal location is difficult to find and co-operation with the land owners is vital. The young shoots that are formed after the last season's heather has been burnt off are the ones which are good for nectar production. A managed moor is therefore essential as long, leggy heather yields very little nectar.



Hives on the moor. Strapped up and standing on the ground. Photo: Tony Jefferson.

Also consider potential problems arising from local wildlife, such as sheep who could knock hives over or snakes who could pose a risk to beekeepers. Position the hives directly on the ground without hive stands, but with some thin plywood in front of the hive to prevent grass growing over the entrance and space them about two 'sheep distances' apart. Sheep like to scratch their backs on the corners of hives so if they are placed directly on the ground and strapped up they are less prone to being knocked over. When taking hives off the moors snakes are often found underneath so gloves and care are required. I often see hives positioned near main roads and the bees have to fly over the road where many are hit by passing traffic or literally 'run over', so do give some consideration to road locations.



Use healthy robust bees on the moor. Photo: Tony Jefferson.

Use healthy, robust bees

My beekeeping is based around breeding the dark bee, *Apis mellifera mellifera*, as I believe these to be well-suited to the harsh environment and periods of high work on the heather moors, due to their good productivity at low temperatures. The weather on the moor can change dramatically from warm days to very cold nights, and these bees seem to be able to

withstand such temperature variations as well as long periods of confinement and reduced egg-laying which can result. They also show good recovery when taken off the moors, making them a good species to work with.

When best to take bees to the moors

Times do vary but it is anticipated the heather should yield nectar following 'The Glorious 12th (of August), the start of the traditional grouse shooting period. Seasonal variations do occur but the aim is to have plenty of foraging bees available for this period. This means plenty of eggs need to be laid six weeks prior to the beginning of August (i.e. mid-June) this period falls right in the middle of the usual 'June gap' so stimulative feeding with 1:1 syrup, i.e. thin syrup, is usually needed during June.

Preparing bees for the moors

There is little point in taking small hives to the heather so the aim is to have colonies on a minimum of ten frames of brood. I use brood and a half and no queen excluders and those who know the 'Jefferson way' will realise we vigorously argue the benefits. If your colonies are smaller than this consider uniting the small colonies to get plenty of bees.

Manipulation of brood in early June and before taking them to the heather is required to get good heather-gathering colonies. From early June spread the centre of the brood nest and place at least one, more if a strong colony, of empty drawn comb in the centre to get lots of eggs. The old brood on the outside will ensure any honey is stored in the supers, so no queen excluder is needed. At this stage producing eggs is the major consideration, the stimulative feed should continue and there is likely to be plenty of pollen available during the June gap, if not nectar. The week prior to moving to the heather stance, the young brood is then moved to the outside (reverse of above) the older brood is now in the centre and this will emerge first while on the moor, the queen will then re-lay in these cells to produce 'winter' bees. The young brood on the outside makes sure the honey goes in the top. The reason for not using queen excluders is that the queen's laying rate will already be reducing at this time of year and every egg produced is likely to be needed for the winter bees.

Prior to moving them any sealed summer honey is removed; if any is unsealed it can be placed on other colonies or left on the top of the hives that are going to the moor. Put supers on each hive prior to moving as plenty of space is required for the bees to expand in transit. A general rule is, add one super for every box of brood, so if using a brood and half then add two empty supers. You will give your bees a good start in their honey production if you provide them with drawn super combs. Remember it takes at least 8lb of honey to produce 1lb of beeswax, so drawing out comb on the earlier crops should be carried out. Drawing out thin super or even starter strips when on the moors, will lose lots of valuable heather honey.

Maintain high levels of insulation while the hives are on the moor due to the cold nights, as it takes less energy for the bees to ventilate and cool the hives than it does to keep them warm. The honey will be ripened and sealed much quicker if top insulation is provided.

Our floor boards are our own version of the 'heather' floors which were sold by Steele and Brodie. These are flat floors that have a funnel type entrance with the bees entering from below. This has major advantages as the funnel is an internal alighting board so bees do not get blown away and there is room for the bees to cluster in the funnel to aid fanning and ventilation for honey ripening. The major advantage of the funnel is that a foam block is easily inserted for moving the hives.

Transporting the bees

When moving the hives to the heather consider the transport to be used, e.g. a car, van or trailer, as minimum stress is the aim, and trailers give the bees a very harsh ride.

Strap the boxes together securely; use a couple of straps if unsure. I dislike the spring fastenings and toggles that are available; they are fiddly to operate. Consider moving the hives in the early morning to get them there before 7am. Things do go wrong and contingencies, such as daylight, 50mm 'gaffer' tape and spray deterrents (Fabispray / Apifuge) are useful as the smoker will almost certainly be out. Wear a bee suit as a precaution and have gloves available. For those who have not yet managed to dislodge boxes or drop a hive when moving it, you have done well; it will occur at some stage!

Provided you have given them empty supers then full top mesh travelling screens are not required for a trip of up to fifty miles. Too much top ventilation can agitate the bees, but make sure they are kept in the dark by placing some hessian sacks over the top. I use a piece of varroa mesh pinned over the porter bee escape hole on the glass quilt, and this is adequate ventilation. On arriving on the moor position the hives directly onto steady ground and leave the bees to settle for five to ten minutes before removing the foam entrance blocks. I count the foam strips to make sure they are all removed. Leave the straps on so they are protected from wind and sheep.

Maximising the crop

When on the moor and the weather is fine and the heather is flowering well, there is always the temptation to add more supers. This can be counterproductive as it is far better to get one or two full, capped supers than three or four that are only half capped. To maximise the crop move the sealed frames to the outside and the

unsealed to the middle. At this stage, if the weather is good then, rather than adding a full super, a few sealed frames can be removed and more unsealed can be added in the centre.

Prolonged cold and/or wet weather can occur while on the moor and starvation can arise very quickly. So, if the weather has been poor check the hives, because large colonies can starve to death in a matter of a couple of days; feeding on the moor is not un-heard of.

Taking off the honey and returning the bees

Assuming a good crop of honey has been gathered then the next stage is to get some removed, processed and the bees back home and set up for winter. Removing large hives full of honey is not easy due to the weight, so it is likely that the supers will need to be removed. The best method is to use clearer boards as robbing by other bees occurs very easily, especially at the end of a flow when the colonies are still strong. Brushing, shaking or blowing off bees to clear frames is to be avoided.

Rapid clearing can be ensured if there is a clear space below and above the porter bee escape. In a National hive having eleven frames the porter escape is in the centre, and it is best to remove the centre frame, then clearing in 24 hours will be likely. Remember if there is any brood in the frames to be removed these will not be cleared as the nurse bees will not leave the brood. As expansion space is needed for the trip home, leave a super in place.

Honey processing



Processing the honey has a few options. Traditionally the comb is cut from the frame and pressed out. Presses are difficult to locate and are quite expensive items, but most associations have one available to loan to members. For small amounts consider scraping back to the foundation so that the foundation is preserved for the following season. The scrapings can go into a vacuum type filter unit; the vacuum soon pulls the honey through as long as a little-and-often amount is placed in the strainer.

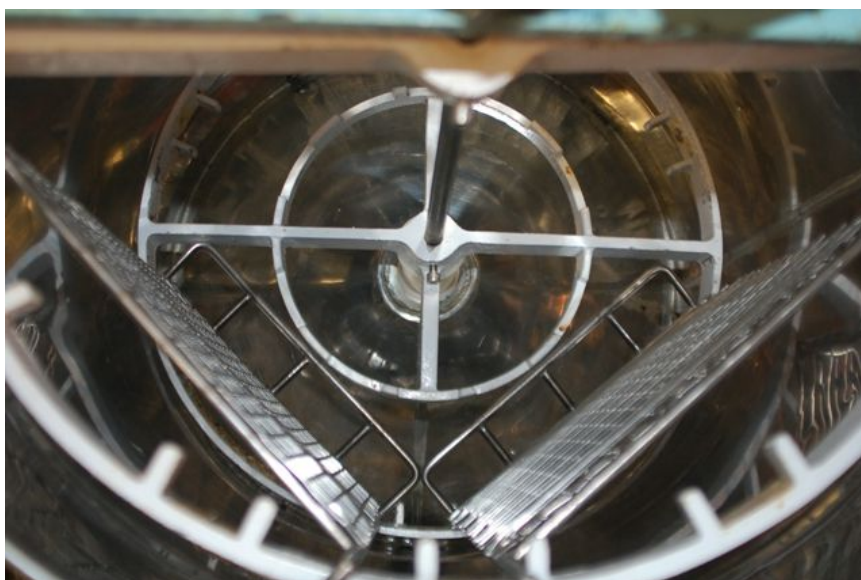
Heather honey press. Photo: Tony Jefferson.



We have a big advantage of having a heather loosener which enables us to spin out the frames using a tangential extractor. The frames must be put in the extractor the correct way; the bottom bar needs to face the direction of travel. The loosener, although initially expensive, is a brilliant piece of equipment as it saves drawn comb for the next season as well as lots of time in re-waxing frames in the spring.

Heather honey loosener. Photo: Tony Jefferson.

Ling heather honey is thick (thixotropic) and difficult to fine filter. It is therefore difficult to remove wax pieces when preparing it for showing, unless pressed through fine filter cloth.



Tangential screens in a radial extractor. Photo: Tony Jefferson.

Leaving only heather on the hives as a winter food often results in dysentery around Christmas time. If there has been a poor ivy nectar flow, then feeding with thick syrup in the autumn and fondant from the beginning of November assists in providing a more balanced supply of food over the winter.

I am a firm believer that the ambient temperature for varroa control with thymol based

products is not really an issue as long as the hive is reduced to a single brood box before feeding for winter and then applying the varroa treatment directly at the brood area; the heat of the small amount of brood is sufficient for the thymol to operate. Our thymol treatment is applied into October as it also knocks down more adult mites.

Winter maintenance

All that is needed over winter is to keep an eye on the hives every two weeks to replenish any jars of fondant that have been used. Meanwhile watch for the first pollen to become available; normally this is the pussy willow catkins and small clumps of snowdrops. Then a floor change is carried out to remove mouse guards. If

left in place, they strip the vital incoming pollen off the bees. Then a stimulative, 1:1 feed of syrup in contact feeders (old honey jars) is started to make sure the queens start to lay.

In the north, our first inspections are never carried out until after Easter. Then we are back to where we started this article, working hard all year round for two weeks of decent weather in August and our honey crop. We often wonder why, but the honey is such a highly prized product that all the effort is worth it when we put lots of thick, high aroma, wonderfully strong tasting honey in jars and buckets ready to go out for sale. However, in 2012 we had to reminisce about this last point, as there was not much to look at.

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Tony is the author of "*A Practical Guide to Producing Heather Honey*" and "*The Jefferson Way*"

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