

A new season and everyone, whether beekeepers or not, will wish for a better year than last year. What happened to the drought and heat forecast by scientists in relation to global warming? It is obvious that winter and summer are less distinguishable, both being as wet as each other! December, however, did resemble winters of the past with days and nights of extremely hard frost. All of us as beekeepers were worried about the bees since most of them had not entered the winter in a particularly strong state. Reports came from everywhere that bees were not taking their feed because of lack of bee numbers, and we all know that the greater the mass of bees the better for surviving hard weather. The best clothing/protection for bees in winter is more bees.

Many colonies have been lost but my conversations with various people suggest that the losses are not as great as in the two previous winters. At times of fine weather some are flying quite strongly, but evaluating the strength of a colony at this time of year equates to counting your chickens before they hatch. Almost without exception bees are much stronger in January than by the end of March. In January the old bees are still alive but are dead by the end of March and young bees have not yet replaced them in numbers by early spring. January can be very deceiving as far as bees are concerned.

I notice from the WBKA minutes that an old chestnut has again been resurrected, with some of the representatives from one of the North Wales societies underlining the need for a National Centre for Wales similar to the one in England. An old chestnut because they want to locate it in the north-east and also because previous such calls have been made, sadly at the expense of much bickering and losses. Many of us still remember the "waterloo" of Trefeca in the 80s when considerable losses were incurred. I'm afraid that it is a futile dream or as one beekeeper remarked - "that cock won't fight"! We do not possess sufficient resources to run such a centre, especially during this financial crisis with lack of capital to research the problem of bee health (apparently the Government intends to provide a little over £4 million towards this research over the next years). Being entirely selfish if there were any hope for such a centre would not Aberystwyth be the best option, for many reasons. The University's Agricultural College is located there, as is the IGER Centre at Gogerddan and the Agricultural Department of the Welsh Assembly (I was going to add Cymdeithas Gwenynwyr Cymraeg Ceredigion [Ceredigion Welsh Language Beekeepers' Society] but I'd better not in case some take me seriously!).

I apologise for turning to English presently, the reason being that I've had several requests from Welsh & English readers for information. I always write in Welsh (although I do write the odd text in English sometimes) as I am exercising my right to write in Welsh for the magazine. When the WBKA was formed in 1943 the right to write in either language was established and also to speak either language in it's meetings. I know of many who could write in English - so why don't you? The sub-editor will be only too pleased to look over your text. So to English for now:

In answer to many requests I include here some notes on my Queen Breeding system for the small beekeeper. So here goes !!

Most of us who have used the Apidea mating hive, have found after the mated Queen has been removed, that the cupful of bees have prepared emergency queencells – one, two or even three. If this has taken place, and most of the time it has, I have always removed all cells but one, and then allowed the process to take its course. I know only too well that Queens bred in this way are often frowned upon, but some of these Queens have turned out well and others have not. This is often true whichever system of Queen breeding I and others have used.

For many years this has set me thinking Would it not be possible to use the apidea mating hive, or similar, to produce a few Queens for the small beekeeper? On discussing this with experienced Queen breeders, the points made in answer were always the same, - too little space, problems with feeding, lack of pollen, not enough bees, - in general it could not be done.

To me, the problem of building up the parent hive over many weeks, de-queening and removing eggs and young brood on the day and grafting the cells, was too much. All that with failing eyesight, often with two or three hives open at the same time, inclement weather and with only two hands. No wonder that we, in such predicament, are seeking for a simpler, easily handled method.

It was in 2001 that I decided, against all advice, to try the Apidea method, and for the following five years all went well with a little modification here and there. But with no success, may I hasten, in 2007 or 2008 due to the cold, wet summers. To overcome some of the problems mentioned by experienced Queen breeders I proceeded as follows:-

- Remove the feed-box from the hive and replace with two extra frames to give a total of five frames. These plastic frames are very cheap to buy.
- Drill a  $\frac{3}{4}$  inch hole through the hive roof, - indentations are already there. This will allow feeding to be done by placing a jar of honey – having made a number of perforations in the lid – over the hole. Take care when finally setting up the hive that the semi-circles in the frame tops, the hole in the plastic crownboard and the hole in the roof, correspond to the perforations in the honey jar. If not bees will not be able to get at the honey.
- Now prepare the frame to take the cell holder. (Here I will deal with one frame of Queencells only, but at times I have pushed things to take two frames of cells.) The cell holder needs to be supported within the frame. I have stuck, using a good fast setting glue, (Super-glue) small strips of wood,  $\frac{1}{4} \times \frac{1}{2}$  to the sides of the frames about an inch down from the top bar. The idea is the same as that used to hold the shelving in a modern bookstand. The cell holder rests on these supports. I have cut to size one of the metal queens cell holders sold by manufacturers to three cells.

- The weight of bees when feeding or drawing out the cells will force the frame sides outwards. To prevent this. I pinch the base of the frame with an elastic band. The postman will help with this !!
- When all this has been done it is time it is time to prepare the Jenter frame to produce the young grubs. The weather always plays a part in good Queen breeding so always, if possible, chose a period of fine sunny days for the process. Before placing the Jenter frame in the hive I spray it with a strong solution of honey/water solution so that the bees will thoroughly clean out the cells. If the Jenter frame is new leave it in the brood box for a week so that it is well walked-over because then the Queen will be more ready to lay in it. I have found that young Queens will be more ready to lay than older ones. When you think that all is well place the Queen in the frame and seal her in. Sorry to the inexperienced, but I know of no other way of placing the Queen in the Jenter frame other than to catch her. Have plenty of practice catching drones – you may squeeze the hell out of the first ones but you will improve with practice! After the Queen has been in the Jenter frame for ten to twelve hours check if there are eggs – if so release the Queen. There is no need to have a full frame of eggs, you are only going to use three/six.
- You now have to leave the opened frame in the brood box for another three days because you will need one day old grubs for your Queen breeding process – never eggs. During this three day wait, find a frame of pollen and cut out a piece to fit exactly into one of the Apidea plastic frame and pinch it in place with a rubber band. (Mid-season there is always a frame at number ten or eleven, full of pollen, and in need to be changed.) Also cut out drawn cell sections to fit the other three frames and again pinch with a rubber band. (I some times store pieces of wild comb for this) The reason for the pollen is because the bees introduced into the hive will not have had a chance to store any pollen. I have found that if foundation is used in the other frames this will collapse under the weight of the bees because it can not be properly fixed in the plastic frames.

On the fourth day – the long awaited day – the hive needs to be charged with young bees. The bees are taken from three different hives – brood box and not supers- by shaking a frame from each into a deep plastic bucket, the deeper the better. Take far more bees than is needed because the older bees will be allowed to fly home and if there are still too many then these can be added to a weaker stock. Young bees, these are the ones that we need, will remain at the bottom of the bucket because they will not fly and are also unable to climb up the plastic sides of the bucket. The bucket can be left uncovered while the the cells are prepared with grubs from the Jenter frame. Choose three/six grubs that are lying in the centre of their cups and well supplied with jelly. Gently place them in the holders and then in the cell holding frame. Gently is the key word in all this. Slowly turn the hive on to its lid – open the base and “pour” in  $\frac{3}{4}$  of a honey jar of young bees into the hive. Yes young bees will “pour” in liquid fashion. Turn the hive the right way up with hand held over the hole in the roof. Place the honey jar in place and remove the hive indoors to a cool, dark place for 24 hours. Place

out doors after this period and open the hive. With a prayer and good weather you may well be successful the first time .