

Queen Cage Experiment:

For those of you that were at the July meeting you might remember that I was planning an experiment on checking the production of hives using different methods of queen management. I used a yard that had 25 hives in it and used 24 of them for the experiment. Eight of the hives I caged the queen in the usual manner using Roger Lewis' suggestion of a long cage over the top bars (August newsletter). Eight hives had the queens removed so that the hives would be queenless and raise their own queen. The last set of eight hives I used an excluder to confine the queen to the lower box. What I was looking for was two things. First was to get a comparative sense of the behavior of the bees within the hives. The question was: is one method stressful to the bees in such a manner that they can be more defensive of the hive?

I was also looking at honey production from the different groups.

What I found out was a bit of a surprise to me in that there seemed to be no noticeable difference between all of the hives. Honey production was statistically the same for all groups. As far as temperament goes there was little difference that I could tell between the hives as well.

My conclusion was that there doesn't seem to be any reason to cage the queen to increase honey production.

As always there is an unexpected revelation with any experiment if you keep your eyes open and here is what I learned from the experience.

Harvestable honey production was lower in the hives that did not have the queen caged because the hatching brood kept me from bringing the frames into the extracting room. Although the bees gathered the same amount of honey it was easier to get from the hives that had the queen caged. I suppose that one could uncap and harvest this honey but for me the brood is too much of a deterrent.

When you take into account the labor involved finding the queen and getting her into a cage seemed to be the most work involved and the subsequent check for emergency queen cells several days later. The least amount of work was keeping the queen in the lower box and checking for swarm cells on a regular basis.

The brood did prove to be useful however. As many of you know, I use escape boards to clear the hives and this year I noticed that the boards did best if the bees were leaving the supers and going down to brood. I also shook out several hives and stacked the supers in the bee yard with escape boards on the top and bottom. As always there were a few bees hanging on to the combs and some refused to leave the honey super stacks. I put a

couple of frames of comb that had brood into an empty super after shaking off most of the bees. I then placed this super with two frames on top of the stack of honey supers. The next morning all of the bees were on the brood and none were in the honey supers under them. It was a fairly easy matter to lift the super off with the bees and set it aside so that the supers underneath could be loaded into the truck before the bees started to come back in.

Of course the above study and the management of the hives was done without regard to the implications on wintering the bees over. If wintering were part of the plan then it would be pretty clear that the break in the brood cycle would have an impact on the ability of the hives to make it through a normal winter. *Steve Victors*