

North Bucks Bee Keepers' Association

Newsletter July 2013

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Calendar at-a-glance

22 nd September	Honey show
12 th October	County honey show

Apiary site offered

A conservation program in the Adstock/Thornborough area is kindly offering apiary space to a member or members of NBBKA. The location has young mother orchard and the managers of the program welcome bees on their land. Should anyone wish to take up this rare and generous offer, please contact Annie on 01296 712197.

School Project – Do bees have memories?

NBBKA were approached to assist twelve-year-old Pippa, of the Hazeley Academy (where our beginners lessons are held), in her school science project, the broad theme of which was “the bottom of the garden”. Pippa's experiment was similar to the famous cognitive experiments of Karl von Frisch and Randolf Menzel in the early 20th century. Bees would be fed sugar syrup from a petri dish over a coloured shape, adjacent to similar water-filled control dishes over other shapes. After the bees had learned which shape provided syrup, the sugar was to be removed and the number of bees who remembered the correct shape and returned to it despite the lack of syrup would be measured. Having interviewed a willing NBBKA committee member about his beekeeping experience, the experiment itself and the recommended safety provisions, Pippa set up her experiment next to two beehives at a Milton Keynes apiary. Despite much dedication to and enthusiasm for the science, Pippa



could not tempt the bees to find the syrup. A switch to the bees' own honey was required, which saw much better results, albeit mainly bumble bees. Unfortunately the experiment was inconclusive, with the abundance of nectar-rich flowers surrounding the equipment, the poor weather and ants cited as possible reasons for the bees' lack of interest in the dishes. Nevertheless, our budding scientist seems to have caught the bug for beekeeping and will hopefully be seeing the inside of a hive soon as part of a weekly inspection.

Regular Columns

July Apiary Notes from Andrew Beer

I intend these notes to be brief and to the point but I will let you be the judge of that. I know many of you have been taking off the first of the crop which is marvellous. For those who haven't, there is still hope. This is not one of those years when if you forget to add supers, colonies take to building a riot of comb below mesh floors and in roof voids (plus, of course, a sticky mush). In my experience, super combs this year are being filled patchily. If you are in an oil-seed rape area you will need, if possible, to extract supers "comb by comb" as soon as the contents are ripened and before combs are capped. N.B. To test for ripeness, do the shake test described earlier in the year. But do leave colonies with enough stores. This is particularly a potential problem with strong colonies in small brood chambers such as WBC or National. You see an active queen by her exertions turns a brood chamber into, in essence, a maternity ward with perhaps all stores going upstairs into the supers, so if you remove all stores in supers and bad weather follows for a few days, the colony could die. The food rule – any colony at any time must have a minimum of 12 lbs of stores (for the purpose of calculation approx. 2 ½ Deep National Board frames). Any colony which is not in that happy position for any reason must be fed.

An interesting question is how do you **feed** a colony with supers in place without risk of feed getting into supers and into the public food chain. To the great Robert Manley it was no problem. Manley thought the bees would take the syrup to the brood chamber where it was needed but try explaining that to "Elf & Safety" when those fine jars you are selling contain T & L Best Granulated. Or should you just carry out the boring task of clearing the supers of bees, later removing supers (by which time the bees may be dead). There has to be a compromise and this is mine. Put supers (and occupying bees) to one side place deep eke above brood chamber (and queen excluder). Invert one gallon of feed (please use the 1 pint of water to 2lbs of sugar mix, my advice, many disagree) over the "centre" of the bees below. Once done, put a cover board over eke but reduce feed holes in board to one bee space and complete hive re-assembly. What have you done? First, hopefully, you have perhaps avoided death of the colony. Second, but just as important, the restricted access to the supers will tell the bees that any food in the supers is there to "steal" and to take down to the colony below and that no syrup should be taken from the bucket feeder to the "hostile" supers above. N.B. Made hostile by the one bee space entry you have created in the cover board. A strong colony should clear the bucket within a week. You should of course put the hive back into its usual configuration as soon as weather, stores and forage permit.

I constantly refer to the need for each beekeeper to have **enough colonies** to survive winter losses. You can produce any statistics you like (for example, it has been stated that some commercial beekeepers lost over 50% of their colonies in the winter of 2012-13) but they are only averages and any of us individually could suffer even greater losses. As I have said before, my gut feeling is that all beekeepers should now have a minimum of five hives at autumn count if necessary (because of nuisance or annoyance to neighbours or other practical reasons) spread over 2 apiaries. If you have more than one apiary, have them at least 3 miles apart, enabling you to move bees between sites without serious risk of drifting. If you agree with me and you need more bees the question for many is how to get them. I most strongly urge you not to take on any bees except from a reliable source or after vetting by an experienced beekeeper and, generally, not from outside our N. Bucks area. A major factor in the recent spread of AFB/EFB is down to indiscriminate movements of infected bees and there is evidence of one or other of these diseases flaring up in an area previously unaffected following the moving of an infected colony.

The likelihood is that those who have previously been able to supply with stocks may find it harder to do so in the future (because of their own losses). So what is to be done? You **increase stocks** as the honey flow comes to an end!! Think about it. From 1st July to 30th September there are 92 days. From, say, 20th July, there will be little incoming crop and therefore little crop to lose if bees are diverted to increasing stocks. It is easy for us to sit back, mope because of another bad season, and wait to try to buy more colonies in 2014 (which, at best, may not be available through normal sources until mid-June 2014, by which time, you've guessed it, you will miss all your crop for 2014 too. How depressing. So, can I urge you to get cracking raising bees, now. It must be within the collective power of our bees and ourselves to increase the number of colonies in North Bucks by, say, 10% between July and October, with minimum outlay of time, skill or experience.

The methods I now describe are put forward with the small-time beekeeper in mind and are really easy. Of course, they don't always work, but that is beekeeping for you !

Some methods of increase

1. Bees preparing to swarm, good strong healthy colony, perhaps your best hive.

Save and make increase from the queen cells! Remove the queen with the frame she is on, one of brood and one of stores from the colony intending swarming. Leave the colony until the cells are sealed, then divide the colony into not more than three equal parts, each box to contain one good queen cell, brood and feed comb to be divided equally among the three boxes. Apart from the queen cell in each box designated for your next queen, destroy the rest. Put the boxes on one-bee-space entrances and feed (mini feeder buckets are excellent). The box with the queen goes on the site of the original colony. The other boxes are best taken to an apiary at least 3 miles away (to avoid drifting) but if this is not feasible, block entrances to these boxes for 36 hours, keeping boxes with plenty of ventilation (provided by mesh floor to box, if fitted) and in shade. You must build up the nucs so that they go into winter with a good queen occupying not less than 6 frames.

2. No queen cells?

Well, make some!! First set up a nuc with bees but with only sealed brood, and attendant bees, but no queen and no queen cells, and start feeding it. Take care to avoid robbing by other bees and wasps. Say two days later take a comb of day-old larvae from your best hive and put it minus bees in the middle of the nuc brood frames. Go back 24 hours later, maybe 48, and you should find day-old queen cells. Clear all bees from the frame with queen cells (brush, don't shake) and put into spare brood chamber. If more than three queen cells, reduce to the best 3. Now put this brood chamber immediately above the brood chamber and queen excluder of your best hive, the stronger the better. Add supers on top and reassemble the hive. In this situation, in good conditions, the colony – because the queen cannot reach the queen cells (she is barred by the queen excluder above the bottom brood chamber) – will develop the cells with best larval food and not, as you might expect, destroy them. Once the cells are sealed, say 7 days after you put the spare brood chamber in place, make up nucs whether from your best colony or from others, and proceed as above.

3. Surplus stocks in the autumn:

If you read some of the earlier books, the standard practice was to unite surplus stocks. Given the severe shortage of bees this practice now seems to me to be abhorrent. Established beekeepers, if you have a surplus, offer your unwanted stocks to our beginners who are desperate to get started. If money is to change hands, it will be fairer to a beginner if payment is deferred until Spring and is conditional upon the bees winter survival. For my part, I would hope that I might have a few stocks on commercial frames to offer.

I am conscious of many factors, some known and some unknown, some not fully understood, affecting our bees, factors all out of our control. But we have to play our part in our bees' survival and the very least we can do is to keep them in the best possible order and be proactive in their increase and survival.

Something I hate to mention but must: **Winter**. Winter 2013/2014. Some time in July (in this late year, perhaps even early August) the honey flow will slow down – bees will still be foraging but there will be no further crop for us. A signal that this has happened is that bees appear to be “sitting on their hands”, hovering at hive entrances, showing little inclination to forage and on inspection colonies may be anxious and tetchy. This means that the robbing season has started or is about to start, when our little darlings can become little devils! Leave a little syrup about, a gap in a brood body, and the robber bees (and wasps) will be “on the case” in minutes. At that time of the year colony (and especially nuc) safety is the name of the game. I am constantly shocked to go to the apiaries after the flow has ended and find even strong colonies without entrance blocks. Believe me, it is inviting disaster. When the flow ends all colonies and nucs should have entrance blocks in place, strongest on the 4” setting, any others on 1 inch, but really weak ones on one bee-space. Come August, all my stocks, regardless of strength, are put on the 1 inch setting but on one bee-space if they appear in any especial danger from

robbing. Supers must now be cleared using Porter escapes (not by shaking, as mentioned earlier); honey removal is best done in the early evening. Once the crop has been removed you may need to give an interim feed to keep the colony going until winter feeding starts, on about 20th August.

July Swarm

Can you get a crop out of it without halting its progress? Well, it is possible in a really good July. Hive the swarm on one super, feed heavily and later put a super and queen excluder above the "super brood chamber". These measures should force the bees to put supplies into the top super. Once the flow is over and crop removed, you put the colony into normal order.

Fire!

I lazily left a smoker half lit at the back of the Volvo. Just as well I was around when the surrounding newspaper started to singe. You have been warned ! Any thoughts on a suitable metal container into which I could place the smoker and where you can get it?

Incidentally, those nucs started and maintained earlier in this newsletter – a key ingredient to their success is constant **feed**. So far, it has been a difficult year but perhaps July will relent and fill your supers. I wish you and your bees well.

Andrew Beer

01525 240235 for any concerns about bees.