The Demaree Method of Swarm Control.

SUMMARY of BENEFITS:

- If you want to prevent swarming and operate the colony without interruption to the brood and honey flow then the Demaree method of swarm control is for you. Follow steps [1 – 11] below.
- If you want to expand your number of colonies and are not worried about your honey flow then extend to point [12]
- If you split the colony twice in the season: one week before swarming [say in 2nd or 3rd week of April] and again in July, this greatly helps in reducing the exponential growth of the varroa mite because the varroa needs a continuous cycle of brood production. If the queen is removed and placed on clean foundation with no varroa mites and the new queen takes 23+ days to develop, mate, mature and start laying, this achieves an interruption to the varroa mite cycle during the honey bee brood rearing period.
- The second advantage of splitting the colony is that you can produce a new queen, who can potentially lay 2,000 eggs/day, and this should easily out breed the varroa mites.
- Finally, Oxalic Acid can then be used, when there is no brood, in the winter to achieve a 95/98% knock down rate of the varroa mites, for the start of the new season.

These are the procedures:

1. A colony with two Brood Boxes is required and the time to start this procedure is when there is a good nectar flow and the colony has built up to 6 to 7 seems of bees.

2. The hive on the left is made up of 2 Brood Boxes, a Queen Excluder & 2 Supers. The empty hive on the right is still covered in a black wheelie bin sack, which has worked well as my woodpecker deterrent for the last 3 years.

3. The essential feature of this method of swarm control is that the frames of young brood and eggs and nurse bees are moved to the top of the hive, while the queen and all the flying bees are left in the lower brood box with empty clean comb or mite free foundation.

4. To achieve this, first separate the 2 brood boxes and then find the queen. Remove all the brood frames except the one containing the queen and replace these with drawn or new foundation. Transfer the combs containing brood to the 2nd box. If the queen is not marked, now is the time to do so. Place her on drawn comb in the bottom brood box. Re-assemble the colony by placing the queen excluder above the bottom box and insert a couple of supers between the bottom and top brood boxes, thus:

• Brood box with young brood + eggs.
• Super.
• Super.
• Queen Excluder.
• Brood box with queen, + 2 frames sealed brood & rest empty combs [drawn if possible].

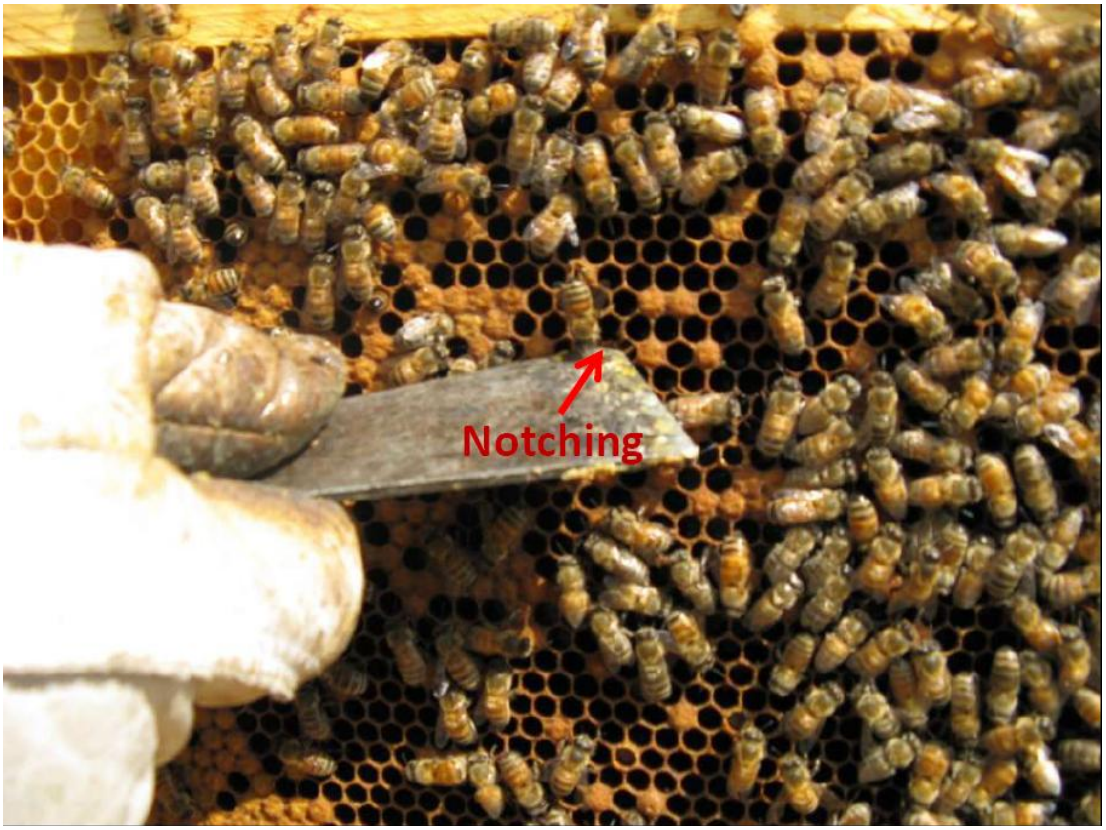
5. After about ½ hour, the rest of the nurse bees migrate to the brood at the top and the older foraging bees stay with the queen below the queen excluder, as if they had swarmed.

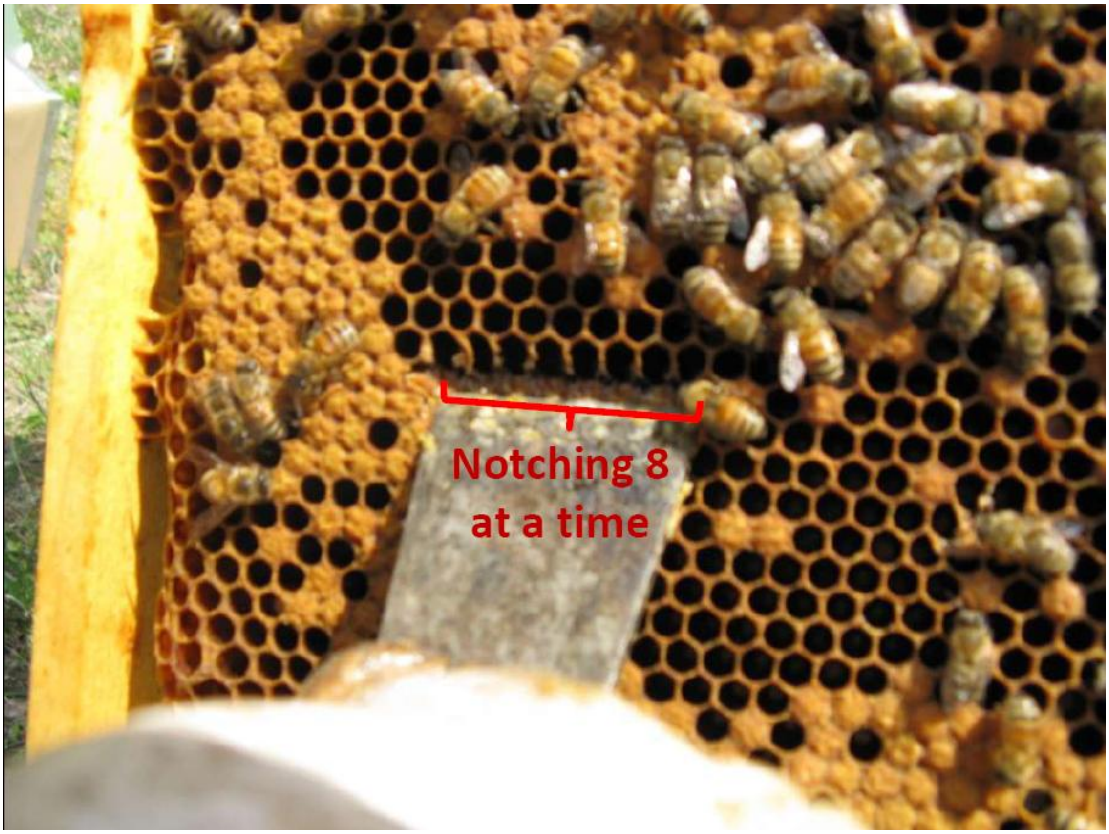
6. The colony thus has all of its brood and the queen, but the queen has a new brood nest below the excluder, while the current brood combs are in the top box. In twenty-one days all the brood will have hatched out of the combs above the excluder, and the bees will begin to hatch in the queen's chamber below the excluder, so a continuous succession of young bees is sustained, with no set back to the colony or loss of honey production.

7. If you want to encourage the bees in the top box to develop a queen cell, then insert a division board below this top box with an entrance for flying bees to bring in pollen and nectar, like the hive on the right.

8. If there is not a strong nectar flow, it is a good idea to feed both colonies with a rapid feeder. Also if you select 36 hr old larvae [i.e. very small C shape larvae] and use a hive tool to create a notch on the bottom edge of the cells, 10mm deep, this will encourage the nurse bees to draw down a queen cell from these selected cells.

9. See the illustrations below:





10. Inspection of the top box seven days later will, with luck, reveal several open queen cells in various stages, on the cells that have been notched.

11. After selecting the best two new queen cells, these can be left to develop in the top box. This new queen once established and laying can be used to replace the old queen.

12. Alternatively, the new queen can be used to set up a new colony; but remember splitting the colony in two will sacrifice the colonies honey production for that year.

13. If you do not want to waste the remaining queen cells, they can be used to start new colonies in 'Nuc' Boxes with two frames nurse bees.

14. Use a sharp edged tool to cut away the honeycomb around the top of the queen cell. This can then be carefully removed and gently pressed into a frame of drawn foundation in the centre of the 'Nuc' Box, add two frames of nurse bees to complete the operation.

15. It is best not disturbed for the 23+ days it takes the queen to develop, mate, mature and start laying.

16. The best time to repeat the process again, of separating the two brood boxes, is in July.

17. July is the best time as it gives a new queen enough time to build up the colony strength before the winter. Doing it twice means that we have interrupted the breeding cycle of the varroa mite twice, which will limit its exponential growth rate, during the honey bees breeding cycle.

Or for two alternative views look at:

https://www.youtube.com/watch?v=d1tnjND8GXg

http://countryrubes.com/images/Swarm_Prevention_By_Demaree_Method.pdf

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