

Simple Queen Rearing

By Nick Withers

This is aimed at the less interventionist kind of beekeeper, perhaps the 'garden' beekeeper with say, 1-3 colonies.

Why do it? You will want to ensure you have young queens in your hives to give maximum vigour and minimum swarming. You will have to use one of the colonies to raise the queens without rendering it useless for honey production. You will probably only want to raise 1-3 queens or a few more for friends if you wish.

The method must ensure a good quality queen is raised but to be simple the queen cells will be emergency cells raised from larvae selected by the worker bees. As described there is no need to find the old queen.

For success you must know (or look up) the timetable for the development of a queen bee.

Development of a Queen Bee

	Day	Stage	
egg laid	1	egg	best queens are reared as queen cells from eggs or very young larvae
	2	egg	
	3	egg	
4	larva		
5	larva		
6	larva		
7	larva	oldest larva that can be reared into a queen	
cell sealed	8	larva	pupae are very delicate and fit loosely in queen cells. Combs should not be shaken or roughly handled during this time.
	9	pre-pupa	
	10	pre-pupa	
	11	pupa	
red eye	12	pupa	
yellow thorax	13	pupa	
yellow abdomen	14	pupa	
pupal moult	15	pupa	
queen emerges	16	adult	

Method C Raising One Queen in a Nucleus

What to do	Comments
<p>First, select the hive you wish to take the nucleus from (the donor) and the one you wish to breed from (the breeder).</p>	
<p>Stage 1. (total 0 days).</p> <ol style="list-style-type: none"> 1. Open the donor colony down to the brood box. 2. Shake bees off combs into bottom box 1 by 1 and select 4 combs for the nucleus, 2 with plenty of stores, 1 with open brood and 1 with sealed brood. Select and shake a couple more combs with brood. Place them all, spaced out slightly, in a 2nd empty box. 3. If you see the queen, keep her in the brood box and select the remaining combs without shaking. 4. Put on queen excluder. 5. Put on 2nd brood box with the shaken combs. 6. Put on a second excluder (if you have one). 7. Put on supers and close up. 8. After about 2 hours worker bees will have covered the combs in the 2nd box. Open the hive and transfer the selected combs to a 5 frame nuc. box. Put an empty drawn comb in the middle. 9. If the nucleus is to be kept on the same site, shake in bees from the 2 extra brood combs and close up. Keep it closed in a cool dark place for 3 days before setting out after dark. Give occasional sprays of water. 10. Otherwise, do <u>not</u> add extra bees but close the nucleus up and take it to another site more than 2 miles away. 11. Replace the extra combs in the donor hive, add combs or foundation as needed and close up. 	<p>You now have a queenless nucleus with two combs of brood, 2 food combs and an empty comb to eventually hold the queen cells. In 7 days the open brood will be largely sealed and although there will be queen cells it will be too old to start any more. The sealed brood may have started to emerge.</p> <p>The purpose of this preparation is to ensure that queen cells are only raised from the eggs you select and place in the nucleus.</p>
<p>Stage 2. 4 days later (optional).</p> <ol style="list-style-type: none"> 1. Open the breeder colony down to the brood box. 2. Remove a comb without brood. 3. Insert an empty drawn comb in the middle. 4. Close up. 	
<p>Stage 3. 3 days later (total 7 days).</p> <ol style="list-style-type: none"> 1. Fetch the comb from the breeder, now with eggs. Alternatively fetch an ordinary comb with eggs. 2. Open the nucleus and destroy all queen cells. 3. Take out the empty comb and cut a hole about 1 inch square in the middle. 4. Cut a matching piece out of the comb with eggs and insert it in the hole in the empty comb. 5. Replace this comb, now with 1 square inch of eggs, in the nucleus and close up. 6. If there is no honey flow, put on a feeder with thin syrup. 7. Leave the nucleus undisturbed until you wish to check out the new queen. 	<p>The queenless nucleus will raise queen cells on the only viable brood, the square inch of comb with eggs. This ensures that despite it being a nucleus, the breeder has a surplus of nurse bees to raise the queen.</p>