An Easy method of Queen Rearing.

By Michael Birt

This method of rearing honey bee queens is perfect for the beginner and, for the experienced bee-keeper has well. It requires the least amount of 'queen rearing equipment' and calls for the least 'handling' of eggs and other fragile bee stuff!

Your first task is to get the eggs from your breeder queen. Fortunately, you do not need any special gear to do this! You just need a frame of **drawn foundation**. Ideally, it is empty (no brood, pollen or honey.) Go to the hive with your breeder queen and locate the brood nest and remove a full frame of capped brood from the centre of it (you can use this to populate your [**Starter Hive**](http://www.virginiahoneybee.com/content/starter-hive) **(see below)**). Replace the removed frame with your empty frame of drawn wax. You have just given the breeder queen a whole slew of open slots to lay in.

Wait four days and you **should** have a frame full of eggs and/or larva that has **just hatched**. These are the perfect age for building queens. Any older and they would make defective queens.

Pull the frame and inspect it. You want to determine which side is best (I like to use a magnifying glass.) We're looking for a Lots of eggs, most of which should be lying down and slightly curved (just hatched or hatching.)

As with most queen rearing methods, you need a [Starter Hive](http://www.virginiahoneybee.com/content/starter-hive). It's probably good to get this started a day or two after you drop your frame into your breeder queen hive. This method usually requires something larger than a nucleus, (but you get a lot of queens from it.)

Since (as will be shown below) you stand the chance of raising 50 or more queens with this method, you need a strong bunch of nurse bees with plenty of food (or you end up with queens that were not raised under optimal conditions.)

On the good side, starting at the top of the frame, destroy two rows (left-to-right) of eggs, clear across the frame. Leave the next row of eggs intact and then destroy the next two rows. Continue to the bottom of the frame.

To 'destroy' a cell with a queen egg in it, you can usually just push a match stick or something similar into the cell and squish it a bit. At this point, you will have a frame with several horizontal rows of good eggs.

We need to create space between these eggs, as the bees may go ahead and build them out, side-by-side, effectively gluing them together, making it impossible to take one and place it into your target nucleus or mating nucleus

So, now you go from left-to-right, along the rows of good eggs, and destroy every 1st and 2nd cell, leaving the 3rd as is (with a good egg in it).

**Note:** At this point (as alluded to above), you have a frame with a ton of potential queen cells. If things go right, you could end up with 75 queens! Since most folks do not need that many queens, it doesn't hurt to destroy a few more 'good' cells above, reducing the number of queens you will be producing. Again, as mentioned above, it takes a lot of resources and nurse bees to **properly** raise so many queens. So, in this case, more is not necessarily better. If you only need a couple of queens for your own hives, I think it is better to simply have 10 to 15 good eggs for the bees to start and draw. They will still need resources (honey/pollen), but they will not need as much as they would for 75 queen cells.

Now that you have your frame of good eggs, you want to lay it down (side-ways) on the top of your Starter Hive with the good eggs facing down. Placing an empty (no foundation) frame beneath it is also required (or some kind of elevation) so that they can build out the queen cells without attaching them to the frames below.

After 10 days, carefully remove the frame and there should be a bunch of capped queen cells. The key here is that they have just gone through their sensitive phase, when it is very easy to damage them in transit. But, they are only a day or two away from hatching! *Day 10 or never* is the rule. If one hatches before you get in there, she is probably going to kill the others immediately.

Carefully cut out the queen cells and either place them in a new Nucleus (queen less for 2 days prior) or place them in a Mating Nucleus. Hopefully, you have enough cells to place 2 or 3 in each Nucleus, ensuring a successful hatching and emergence (also takes care of the issue of accidentally harming a queen cell without knowing it.)

I like to give the queens a solid 10 to 14 days before checking on them. I should have a laying queen at this point

**Layout of cells**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Queen Cell Starter Hive.

A Starter Hive is basically a bunch of bees that have **no queen** and no eggs or recently hatched larva to start a queen with. It is important that a Cell Starter have no queen - research has proven that cells *started* in a queenless situation have a much higher rate of acceptance in the receiving colony/nucleus.

In my opinion, one of the two best ways to create a Starter Hive is to first identify your moderate, or even under performing, hives (as long as you are sure that they are not 'under performing' because of disease.) Open this hive up and find the queen to isolate her. Then, take a few frames of brood and some resources to place in a Nucleus. The goal is to overflow the Nucleus, so I think it is great to actually place the Nucleus where the full hive once sat and move the full hive a few feet away. It is really important that this hive be **overflowing** with bees - they are going to need to raise a bunch of queen cells and need to feel overcrowded and ready to get to the task.

So, the creation of a Starter Hive effectively translates into splitting one moderate hive into two:

1. Nucleus with no queen or eggs.
2. Full hive with old (moderate) queen

Once I am finished with the Starter, I like to give them one of my new queens that they have raised to let them move on to become part of the Nucleus bank. Although many folks would recommend that I kill the moderate queen and replace her with one of my new queens, I typically do not do that (actually, I never do that.) Although I constantly push to have more queens and hives from my strongest lines, I do not want to remove all genetic diversity. So, with moderate hives, I will either let them continue to chug along for the time being or I will remove the old queen and let them raise another queen.