

## Philcrafthivecraft.com Beekeeping Information Sheet

### **When can we re-queen or install new queens?**

Years ago when I was a greener beekeeper, I asked a beekeeper friend, "When can you re-queen?" His answer was, "Anytime, but..." It's probably easiest to re-queen in the spring when there is a strong honey flow going and lots of bees and brood in the hive. Still, as my friend said, we can re-queen anytime. Beekeepers sometimes need to re-queen in summer (discovered a queenless hive in a mid-summer inspection?) or wish to in order to take advantage of lower summer queen prices. Regardless of your reason, re-queening in any season other than spring involves special considerations.

#### Honey flow

Hives will more readily accept a queen when there is a honey flow on. In summer when there isn't a honey flow, you can create an artificial one by feeding. Start feeding about a week before you introduce the new queen and continue feeding for a week after re-queening.

#### Finding the old queen

Another consideration for summer re-queening, for newer beekeepers, is that there are a lot of bees in the hive, which can make finding the old queen difficult. The old queen **MUST** be removed or destroyed, or the bees will not accept the new queen. They will either refuse to free her or will free and kill her. When looking for the queen, use a minimum amount of smoke, and work as gently as possible. Keep in mind that the queen's job is to lay eggs, so you'll most likely find her on a brood frame where there are empty cells in which to lay eggs. She'll not be on a frame that is all honey or full of capped brood. Sometimes you can literally track her across the brood box from frames of capped brood, to frames of un-capped brood, to frames of eggs. I look for frames of eggs, or frame with empty cells, located next to frames of uncapped brood. Another, though more laborious, method is to literally sift the bees through a queen excluder into an empty box by shaking the bees off the frames onto the queen excluder, then smoking and driving the bees through the excluder. The queen (and drones) cannot pass through. Several years ago there was a nice article in one of the beekeeping magazines about this method. If you'd like a copy of the article, let me know.

#### More on re-queening existing hives

Another very important consideration is that existing hives can be more stubborn about accepting a new queen than nucs or packages of bees are. (If you do not know what a nuc is, read on.) There are several methods for re-queening hives, some more likely to succeed than others. The simplest method, which is the same one we use to introduce a queen into a nuc or package of bees, is to simply remove the old queen and place the new queen, in her queen cage, into the hive. The following steps can increase your chances of success with this method. 1: If possible, kill or remove the old queen one afternoon, and introduce the new queen the following morning. (A gap of just two to four hours can also be effective). This brief period gives the bees some time to realize that they are queenless and can make them more receptive to a new queen. 2: Place the queen cage between frames of capped brood, or between a frame of capped brood and one of uncapped brood. If the hive has been queenless and has no brood, you can transfer frames of brood from a stronger hive. 3: Remove the cork from the candy end of the queen cage and place it candy end up. This allows you to check on the progress of freeing the queen without handling the queen cage, and, if any attendant bees die, they will not block the hole in the queen cage. 4: Check on the queen cage in a couple of days and remove the cage if the queen has been freed. Otherwise, do not disturb the hive for a week after placing the queen cage in the hive. 5: **DO NOT** get in a rush. If several days go by and the bees in the hive are eating on the candy but have not freed the queen, leave them alone. I've seen the bees take almost a week to free a queen. **DO NOT** open the cage and directly free the queen after a couple of days. Time is on your side. 6: If this is a hive that has been queenless for awhile, re-queening can be even more difficult. I have, in such a case, placed the cage in the hive (after placing brood from another hive in the hive to be re-queened) without removing the cork. I'll wait for a couple of days, and then remove the cork from the candy end and proceed as in step 3. This extends the introduction period and increases the chances of success in re-queening a queenless hive.

### Some other methods of re-queening

Following the above steps does not guarantee success, especially with established hives in summer. (Some beekeepers will hold old queens in queen cages just in case of the failure of the new queen). The following are alternative methods, more labor intensive, but more likely to be successful, for summer re-queening. Push-in cages: Push-in cages are made of hardware cloth (when homemade) or plastic (when purchased), about 4"x4" on the front (no back), with sides that are about one-half inch. After feeding the hive and removing the old queen as above, place the new queen on a frame of capped brood without attendant bees (pick brood that is starting to emerge), and push the cage into the frame over the queen. The cage protects the queen, but allows contact with the bees through the mesh just as in a regular queen cage installation. As bees emerge from the capped brood cells, the queen will start laying eggs in the empty cells. After a full week or so, you can remove the cage and free the queen. You can make your own push-in cages, or Betterbee, Inc. (Phone toll-free 1-800-632-3379 or <http://www.betterbee.com/home.asp>) sells a nice push-in cage they call a queen introduction cage. Introducing the queen into a nuc: An "almost" no-fail method is to introduce the queen into a separate hive body or nuc box (a small box that holds five or fewer frames) next to or on top of the existing hive. Along with the queen cage, place in the box a couple of frames of capped brood and bees from the hive to be re-queened (or from another hive if the hive is queenless), a frame of honey, and a feeder. This is essentially starting a nuc or "nucleus" hive, which is the method beekeepers use when starting new hives. Place the queen cage between the frames of brood, and remove the cork as described earlier. After about a week, the queen will be out and laying, and the nuc is established. At that point, remove the queen in the existing hive. Wait one day, remove from the old hive enough frames to make room for the frames from the nuc, and place them along with the new queen in the hive. Make sure the queen is in the center of the frames from the nuc.