

Recommendations for Successful Queen Introduction

This information sheet is designed to be a tool to help you successfully introduce queen bees into your colonies. We offer general guidelines, not hard and fast rules. There are many methods and types of cages for introducing queens, and the ones that work best for you will depend on trial and error, and how convenient they are for your beekeeping operation. The cost of the queen is generally much less than the cost of colony failure or lack of honey production due to losing the queen during the introduction process. The most reliable method of introducing queens is also the most labor intensive. If you have purchased queens of particular lines, or with particular genetic traits that you consider valuable, you might consider using the most reliable introduction method.

Most reliable

- Prepare a small colony by making a divide (a “split”) containing 2-5 frames brood and bees. Feed the small colony sugar syrup, and let it sit queenless for 24 hours.
- After 24 hours, introduce the new queen in a cage. If the cage contains candy, keep the cork in the candy end. DO NOT allow the bees to release the queen by eating through the candy, as usually she will be released too soon.
- After 3 days, open the colony, and observe the bees on the cage. If they are feeding the queen, and are NOT biting the screen on the cage, open the cork or opening in the cage, and allow the queen to walk out within the colony. It is best to remove a frame, and release her in the middle of an adjacent frame, still within the box, to prevent her from accidentally flying away.
- Option: If you cannot return to release the queen after 3 days, remove the cork over the candy end of the cage and replace the cork with freezer tape (only freezer tape, please). The bees will eat through the tape, delaying the release of the queen. It is important to check for eggs within 1-2 weeks.
- Continue feeding the colony syrup. After 1-2 weeks, check for eggs. If there are eggs, your queen has been introduced successfully. If there are no eggs, destroy any queen cells, replace the frames and bees in a larger colony, and try again.
- You may let this colony expand into a full-size colony, or use it to re-queen a full-size colony (see below).

Least reliable

- De-queen a strong colony. Let it sit queenless for 6-24 hours.
- Introduce a new queen in a cage, and allow the bees to release the queen by eating through the candy in the cage.

Why is this method the least reliable?

- Strong colonies do not readily accept new queens, particularly if they are of a different stock or race.
- The bees may release the queen within 24 hours through the candy plug, which does not give the queen and colony sufficient time to acquire each other's odors.

Re-queening Large Colonies

- We recommend introducing a new queen into a small colony, and then letting the colony expand into a full-size colony. However, a large colony can be re-queened successfully by introducing a small colony with the laying, new queen into the larger colony. We understand this process is time-consuming, but if you value the queen, the reliability of this method is worth the effort.

Method 1: New queen is in 5 frame nuc

- Once the new queen is laying well within a small colony (has eggs, larvae, and sealed brood, and you like her brood pattern), you may introduce her into a large colony.
- De-queen the old queen from the large colony. Let it sit queenless for 24 hours.
- Remove 2-5 frames from the large colony (this is a good time to cull old frames), leaving the open space in the center of the brood nest in one box.
- Remove all or some of the brood frames, including the bees, from the nuc, and place them in the large colony. (If you want to reuse the nuc, do not add all the bees and brood from the nuc).
- Cage the new queen, and place her between frames of her own brood.
- Release her yourself (or using freezer-tape) after three days. For greater reliability, destroy any queen cells within the large colony at this time.
- After 7-10 days, check for eggs and the new queen.

Method 2: New queen is in 10-frame box

- You may add the entire box of brood with the new queen to the old colony as follows:
- You may need to remove a box from the old colony (again, this is a good time to cull and/or refurbish frames).
- Dequeen the large colony and let it sit queenless for 24 hours.
- Place a sheet of newspaper (making a small hole in the paper) above the brood chamber, and place the new colony on top of the newspaper. It is not necessary to cage the new queen.
- After 4-7 days (not sooner) check for eggs and/or queen cells.

The key to success with both of these methods is introducing the new queen along with all or part of her brood from the small colony. If you are having problems introducing queens successfully, we highly recommend you try introducing a new queen along with a frame or two of her own brood into the new colony.