

Swarm Control for the beginner



A drone-laying queen

When your queen is laying check the sealed cells to make sure it is worker brood, with even, flattish cappings. If you find uneven domed cappings with the comb misshapen, your new queen has probably failed to mate and is laying unfertilised, drone eggs. Seek advice about replacing her as soon as possible or your colony will dwindle and die out.

Uniting the colonies

If you don't want to increase your total number of colonies, the nucleus with the old queen can be united back to the original colony with the new queen. It is best to do this in the evening, just after the bees have stopped flying.

- 1 Remove the roof etc. from the original colony with the new queen.
- 2 Place one large sheet of newspaper to completely cover the frames and cover it with an excluder to stop the paper blowing away!
- 3 Place an empty brood box on top.
- 4 Find the old queen in the nucleus hive and kill her.
- 5 Transfer the combs from the nucleus, with their adhering bees, into the top brood box in the same relative positions to each other.
- 6 Replace the inner cover and roof on top.
- 7 As the bees chew through the newspaper their scents will mix and they will amalgamate without fighting.
- 8 After 7 days, check whether any queen cells have been started in the top box. Break them down. All the brood combs can be put down into the bottom box, if room. Surplus combs that are free of brood can be shaken clear of bees and taken away. If there are too many combs of brood for one box, surplus ones can be given to other colonies.

Summary - when queen cells are seen:-

1. Remove the old queen and make up a nucleus.
2. Remove all queen cells that are sealed or contain large larvae.
3. Re-assemble the hive.
4. After 7–8 days, select one good queen cell and remove the rest.
- 5 Do not open the hive again for at least two weeks.
6. Unite the two parts if you do not want to increase colony numbers

Ask an experienced beekeeper for help if you have any problems.

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Swarming is the reproduction of a honeybee colony achieved by the old queen leaving the nest with a large proportion of the bees after the colony has made provision for new queens to be raised to replace her, to ensure survival of the colony.

Swarm control is the measures taken to prevent this.

A swarm issuing from a hive generally collects and hangs near the hive before moving off to its new nest site. While this situation can be dealt with by a beekeeper collecting and removing the swarm, this is not ideal. It presupposes that a beekeeper is available at the appropriate time and that the person in whose garden the swarm settles is amenable. These days, members of the public are increasingly afraid of bees, wasps etc., if not for themselves, then for their children, and it is the action of a responsible beekeeper to take all steps possible to control the swarming instinct in his/her bees and to prevent the swarm issuing from the hive.

Factors which will help prevent swarm preparations by a colony include:

- Using a strain of bee with a low tendency to swarm
- Using a young and vigorous queen to head the colony
- Giving the developing colony ample room in the brood-nest and supers
- Ensuring good ventilation in the hive

Marking and clipping the queen

Many swarm control measures involve finding the queen. This is much easier if she is marked with paint or a numbered disk on her thorax. Do this early in the season when there are fewer bees in the colony and she is easier to spot. Get help from an experienced beekeeper if necessary.

Clipping one of the queen's wings stops her from flying and leading off the swarm. It can increase the maximum time that can be left between inspections of the brood nest, but in order to practice effective swarm control, you need to be able to work out what is happening in the colony. As a beginner, you will probably find it easier not to clip queens.

Giving enough room

When the colony contains seven combs with brood on (eggs, larvae or sealed brood), make more room by adding a queen excluder and super. The super should contain at least some frames of drawn comb if at all possible. When the (first) super is full of bees (not honey), add another. Bees need room to store nectar until they evaporate water from it to turn it into honey.

Inspect for queen cells

The swarming season varies with the weather and in different parts of the country. Generally, it begins in late April and continues until late June.

Inspect the brood nest of your colony at least every nine days. Most beekeepers find it convenient to make inspections on a weekly basis. This ties in with the development life cycle of the new queen and enables you to take preventative measures in time to stop swarming.

During the summer, a colony usually builds queen cell cups or play cells. These look like acorn cups. If you find these, it does not necessarily mean that the colony is preparing to swarm. Check these cups, you will soon learn to recognise if one being used to produce a new queen. Swarm control measures should begin when queen cells contain eggs or young (small) larvae.

On finding queen cells

If you find sealed queen cells, it is possible (although not inevitable) that the swarm has left. To determine if this has happened, make a thorough search for the old queen. This is much easier if she has been marked!

If you are sure that she has gone, check through the brood box to make sure that there are eggs or young larvae in worker cells or in queen cells. If so, remove all the sealed queen cells and those containing large larvae. Leave the ones containing eggs or very young/small larvae. Gently shake or brush the bees off each comb back into the brood box so that you can see all parts of the comb. Pay particular attention to the edges of the comb as bees will often 'hide' queen cells at the side or bottom bars.

This puts you in control of the swarming timetable.

If all of the queen cells you find are unsealed, inspect again after 7 or 8 days and follow the steps from 9 onwards to allow the production of one good queen.

The old queen is present

1. Find the queen.
2. Take the comb she is on, together with bees, and place it in another box. This can be another brood box or a purpose built nucleus hive.
3. Transfer two more combs containing stores and bees to the nucleus box.
4. Shake or brush bees from other brood combs into the box. The aim is to add enough bees to the nucleus to cover the brood and keep it warm.
5. Push the frames together, with the normal spacing between them, against one side of the box. Place a dummy board against the exposed comb to separate the nucleus colony from the rest of the empty box.

6. In the parent colony fill up the brood box with drawn comb or foundation. It is important to fill the gap with frames or wild comb will be built.
7. Give the nucleus a small entrance so that the bees can easily defend it, and move it elsewhere at least two metres away. Face the entrance close to a hedge bottom or other barrier to confuse robber bees.
8. Leave the nucleus for three days to get established before feeding it (if necessary) with syrup (equal weights of sugar and water) This will stimulate the queen to keep laying.
9. As the nucleus develops, add empty combs to expand the brood nest.

To choose a queen cell – (in the original brood box)

10. Eight days later (seven if this is the convenient time), examine all brood combs carefully for queen cells. Do not break any down at this point.
11. Select a queen cell which is well placed on the face of the comb, is a good size and has dimples on the surface. Mark the position of the cell by placing a drawing pin in the top bar, vertically above the cell.
12. Carefully brush all the bees off this comb into the brood box, and destroy other queen cells on the frame. Treat this frame gently. Do not jar or shake it or you may damage your chosen future queen.
13. Shake or brush the bees off all the other brood combs into the brood box and break down all the queen cells. Check in the corners and break down all possible queen cells. Better safe than sorry.
14. Re-assemble the hive with the excluder and supers.

Be patient

Do not open up the original colony that is raising a new queen for at least 14–21 days. Doing so, particularly during the time the virgin queen is on her mating flight, will cause confusion. If the young queen is in the hive, you may cause the bees to ball and kill her. If she is on her mating flight, she may be confused when she returns to find the hive open and may fly into an adjacent colony or get lost. Vital inspections that cannot be avoided should take place after 5 pm, that is, when the virgin queen is inside the hive.

When you do inspect to check if your new queen is laying, try to do so quickly. Look for a patch of eggs or very young larvae swimming in Royal Jelly, failing this check for an area of cells that have been highly polished by the workers ready for the queen to lay. Close up the hive, be patient, and check again in a few days.

A young queen will generally start laying 10–14 days after she emerges, longer in a larger colony. However, the smaller the larva in your chosen queen cell, the younger it is and the longer the new queen has to develop. The younger the larva, the longer it will be fed Royal Jelly and the better developed will be the resulting queen. However, this could mean that the new queen did not emerge the day after you broke down the other queen cells, and it will take her longer to start to lay. The weather also influences when the virgin queen can go on her mating flight, and bad weather will result in a delay in the start of laying.

If your new queen has not started laying after three weeks, seek advice from an experienced beekeeper, as she may have been lost or failed to mate.