

Brighton & Lewes Beekeepers



Swarm Collection and Care

Equipment:

Large strong Cardboard Box, flaps taped closed on the bottom if necessary, small holes made with a skewer for ventilation. Box needs to be minimum 1 ft cubed and be able to hold several pounds of bees without collapsing. Or Polystyrene hive with fixed floor or lightweight travel nuc; something you can hold in one arm if you are working alone.

Small bed sheet	Pruners
Water sprayer and/or smoker	Bee brush or large feather
Step ladder	Bee suit, veil and gloves
Parcel tape	Dustpan and bee brush, for swarms on walls or ground

Plastic tub (eg ice cream tub) for catching stray bees, a flat edge is useful if swarm is on a wall
Prepared hive: Floor, entrance block, queen excluder, brood box with foundation, empty super box, crownboard, roof.
Feeder; rapid or contact

Safety.

If the swarm is high or in a hazardous position think seriously about whether it is worth it. Don't expose yourself to danger. You are not covered by insurance if the swarm is over 3m off the ground. The insurance only covers collecting bees and does not include personal insurance for injury or equipment loss.

Warn the public to stand well back and keep animals away.

You may ask for expenses but if you charge a fee you will not be covered by insurance and may find yourself in a difficult legal position if anything goes wrong.

Colonies inside chimneys (unless just settled in which case lighting a fire in the hearth might drive them out) or in cavities etc. are usually beyond our ability to retrieve. The options are to leave them alone, or for the owner of the property to have them killed by a commercial pest controller. Only give advice if you know what you are talking about, in case of legal issues. (There are methods using one-way escapes and leaving a hive there for many weeks, but not for the beginner).

Information required from caller:

You will need the exact location of swarm (ground, tree etc), height off ground, permission to enter property, how long it has been there (the longer the more hungry and irritable they will be and more likely to depart soon), address, name and contact details. Get a detailed description of the insects and the swarm appearance and size as many people cannot tell the difference between wasps and bees. They may also be bumblebees in which case try to persuade the people to leave them alone, the same with solitary bees. For wasps they should call a pest controller to deal with them.

Get there as soon as possible, in case the swarm departs, or if delayed check they are still there before making a wasted journey. The swarm may be on a tree branch, in a dense bush, on the ground, on a fence etc. You will not be able to collect them until they have settled with the queen. It is good PR to deal with it quickly as a service to the community even if you do not require more bees. We don't want beekeeping to become a nuisance to the public, make it a positive experience and take the opportunity to educate the public (and if you know whose hives it came from, educate them too!)

Collecting the swarm:

A prime swarm will have a mated queen, may consist of up to 20,000 bees and be the size of a football or larger, these swarms usually establish quickly in a hive. Later casts with virgin queens can range from the size of an orange to a football if two casts have joined, so if the swarm appears to be in two distinct clumps you may have more than one virgin there. Casts have a habit of flying out of a hive again unless there is drawn comb or brood in there to attract them. They are slower to establish as the virgin needs to mate first.

Swarm bees will tend to a) stay with their queen, b) move up into a dark cavity. The basic principle is to spread a sheet underneath or as near underneath the swarm as possible (easier to see the queen and for grounded bees to move to the box), preferably in the shade. Prune small branches so you can get the box underneath or if possible, around the swarm, ask for permission to prune first. If they are on a branch, give it a sharp knock to dislodge the bees which will fall into the box or if on a wall or fence brush them in to the box as quickly as possible, if on a thin branch cut the branch so it and the

swarm go into the box. If the swarm is in a high or awkward place, a frame of brood or comb which has had brood, tied onto the end of a pole and placed against the swarm will often attract the swarm to move on to it and it can be gently lowered to the ground. If they are in a dense bush or fence post, invert the box over them and they should slowly move up into the dark box.

If you are up a step ladder have someone wearing a bee suit hold the ladder steady for you and brace yourself for when 2 or 3 kg of bees suddenly land in the box. Quickly fold the flaps of the box in place and lower it onto the sheet below, upright or on its side. Tape closed 3 of the flaps leaving a small entrance. If you have the queen the bees will stand and fan their wings facing the entrance and gradually all the other bees will join them. If you do not have the queen they will leave the box and return to the queen on the original site or where she has fallen to the ground. A few flying bees will return to the swarm position as they smell the queen pheromone left there. Brush them into the plastic tub and shake them next to the box and spray or smoke the branch to disperse the scent. Shade the box. After about 30 to 60 minutes, most will be in the box and you can fold over and tape the remaining flap, raise the sheet up round the box and drape the corners over the box. Put it in the car and take it home. Keep it as cool as possible as the bees can overheat and die if it is a hot day. If the swarm has been there more than a few hours there may be bees out foraging and scouting for a new home. Please attempt to get most of the bees, even if this means collecting the box in the evening when they have returned, if stragglers remain they can cause a problem to the public. At about 7000 bees per kg you can calculate how many you have later. Having made every attempt to collect most of them, explain to the householder that a few may remain and to avoid the area for a day or two until they go home or die. If the swarm is in a public place such as a footpath, it is best not to leave it untended at any time, once you have started to collect them you become responsible for them and need to warn the public to keep their distance.

Hiving:

They can be hived straight away into a pre-prepared clean sterilized hive with full complement of frames with foundation with the entrance block in and closed off. It should be in the position you want the hive to occupy; they will orientate to the new site. Some people like to keep them in the box in a cool place, until evening, as they are less likely to fly away then. This may be advisable if you think you have a cast with virgin. You might like to have a queen excluder between the floor and brood box for just a few days to prevent them absconding if it is a mated queen (ie a prime swarm). This does not work with a virgin as they are slim and can pass through queen excluders, in which case have a clean drawn frame, previously sterilized with acetic acid*, in the brood box to encourage them to stay. A frame with brood on will probably make them stay but be sure that it is from a disease free colony. Remove the middle 3-4 frames of the receiving hive, remove the sheet, strike the top and sides of the box to shake the bees to the bottom, invert over the hive and pour them in to the brood box and strike the bottom of the box to dislodge stragglers. Quickly remove any large twigs and gently put the remaining frames in, allowing them to sink in under their own weight as bees move out of the way, to avoid squashing them, put on the crown board and roof. This needs to be done quickly before they take wing. A simpler alternative would be to have the complete assembled brood (entrance closed) with an empty super box (no frames) or eke on top, shake them on to the top bars and you can put the crown board on immediately. They will move down on to the frames and the super can be removed later when you put the feeder on. After a few minutes turn the entrance block round to open it and allow any lost bees to find their way in. If you think it is a cast with virgin and have most of the bees in there, you can leave the hive shut for 24-48 hours with feeder over the crown board holes by which time they are more likely to have settled. The dilute syrup will provide them with necessary water.

Feeding and aftercare:

Avoid feeding them immediately so they can use any honey in their crops to make the wax, lowering the risk of disease-carrying honey being stored on the comb. After 2 or 3 days you can remove the queen excluder and any twigs or leaves on the floor and feed a 1:1 syrup to help them draw out the foundation. It is better to feed them in the evening when they are less likely to fly, as an unsettled swarm or cast may just take the syrup and use it to fuel their departure to another site. If they have been hanging in the swarm for more than 3 days they will probably be hungry so you could feed that evening. The amount of feed depends on the size of the swarm and whether there is a nectar flow on, as you want them to have enough to draw out the foundation but not so much that they promptly fill it with syrup and leave nowhere for the queen to lay. It is advisable to keep the swarm in a quarantine apiary until sure it is healthy, I am aware of swarms carrying foulbrood and Chronic Bee Paralysis Virus and probably other diseases too.

Once settled but before advanced larvae are seen, dust with icing sugar to remove phoretic varroa, if more than 6, repeat. Monitor for brood disease and drone brood. If a mated queen then expect supersedure later in the year.

Amanda Millar 2015

*See Fact sheet - Fumigating comb on <http://www.nationalbeeunit.com/index.cfm?pageid=167> for acetic acid treatment.