CATCHING SWARMS

When bees swarm the queen and up to half the colony leave the hive and settle at a temporary location nearby. It can be in a hedge, on the branch of a tree, on a fence or wherever the queen alights. The swarm may remain there for just a brief time or for as long as a couple of days, whilst scout bees search for a new home. This is the time to catch the swarm. Once it's established in a permanent home removal usually becomes much more difficult and won't be considered here.

Getting Ready

Check the following with the person who has notified the swarm

- Is it a swarm of bees or wasps?
- How long has the swarm been at the location?
- Where is the swarm located e.g. on a bush, tree, fence?
- How high off the ground is the swarm?
- What is below the swarm e.g. grass, flowers, ditch?
- What is the terrain like flat land, steep slope?
- How can it be accessed e.g. nearest road, gates, fences or other obstacles?

Take the following with you:

- A large, strong cardboard box (About the same volume as a brood box.)
- Duct or similar adhesive tape.
- String.
- An old bed sheet, table cloth or something similar.
- 4 bricks or other weights.
- Secateurs.
- A sharp knife.
- A pruning saw.
- A bee brush.
- Hand shovel or dust pan.
- Protective clothing.
- A smoker, fuel and matches.
- Spray bottle with white vinegar.
- Ladder if the swarm is high or borrow one from someone living near the swarm.

Catching the swarm

Once you've located the swarm you must assess the situation. Before starting, ensure that it's been settled for some time. It should be quiet with bees tunnelling in and out of the cluster. There will also be some flying bees both coming and going. You should work out what method you intend to use to catch the swarm. You may be fortunate with the whole swarm hanging from a single branch at a convenient height. Usually things are more complicated. If the swarm is high up, or for some other reason, inaccessible you should consider carefully whether to attempt to catch it at all. It's not worth risking injury for a swarm of bees. Sometimes, if the swarm is in a bush or tree it may be necessary to remove some of the branches. If this is the case make sure the owner understands and has given his or her permission.

If it is a really difficult location, then get advice e.g. from a swarmer who has a "beevac" which does what its name says.

Place the sheet on the ground near to the swarm. Put a brick on each corner to prevent it blowing about in the wind. Bees that have just swarmed are usually remarkably good tempered but it's still very advisable to wear protective clothing, particularly if you need to use a ladder.

If the swarm's hanging from a flexible branch with no other obstructions nearby all you need to do is hold the box underneath the swarm, as close as possible, and give the branch a sharp jerk followed by a few vigorous shakes.

Most of the bees should fall in, but if a fair number remain, you can follow up with the bee brush. However, don't waste too much time on this. All you're trying to do is get the queen and the majority of the bees into the box. The rest will follow later. An alternative is to smoke the remaining bees heavily to make them fly, after which they'll probably be attracted to the rest of the bees already in the box. This also helps mask the pheromones which encourage bees to return to the location. The alternative is to spray the area on the original swarm location with white vinegar. This also masks the pheromones of the swarm.

If the branch is too rigid or the swarm's hanging from a fence or building you can just use the brush but, if there's sufficient space, a better method is to support the box, opening downwards, as close as possible above the swarm. Bees have an instinct to move upwards into the dark. If you start them off by applying a little smoke they should all move up quite quickly. Otherwise you can encourage them by taking a handful of bees and throwing them into the box first. If the swarm is in dense vegetation you may have to gently cut some of it away to give yourself sufficient room to get the box in place. Sometimes the pieces you remove will be covered with bees. They can just be shaken off into the box. There are many other possibilities, fortunately most of them rare. Swarms can choose the most inconvenient places to settle. The best advice in these circumstances is just to use your own initiative.

Once the bees are in the box, take it down, put it in the middle of the sheet and have a narrow entrance so the bees have a dark space to enter. Now stand back and watch for a while. What you should see are the worker bees near the entrance start fanning. That is, they'll be standing, head down, wings working and with a small white spot called the Nasonov gland exposed on the last dorsal segment of the abdomen. The scent from this gland will attract the remaining bees that you didn't collect. Within half an hour most of them should have joined the bees in the box. However, if you didn't manage to secure the queen, it won't happen. Instead, the bees will all go back to the original site of the swarm or wherever the queen has ended up. In this case you'll have to wait until the cluster reforms and settles down again before making another attempt.

It's best to leave the box until most bees have stopped flying. Then close the box and seal with tape. If there are still bees on the sheet then gather up the four corners of the sheet above the box and tie some string around the sheet to make a sack preventing any bees from escaping. The box can then be moved just by lifting the "sack".

If you have a swarm/box kit ready then fitting a hole in the box covered by mesh e.g. wind break will give better ventilation of the box.

Safety

You may have to perform one of the above manoeuvres well above ground level, such as up a ladder or standing on a branch in a tree. If so, take particular care. The first time you catch a swarm you'll be surprised just how heavy it is as it drops into the box. There are about 8000 bees to a kilogram and a swarm can weigh as much as 5kg. You may need three arms: one to support the box, one to shake or brush the bees and one to hold on. Often you can hold the box between your body and another branch or, maybe, use one of your knees. The alternative is to take someone with you, preferably a beekeeper that has done this before.

Hiving the swarm.

The swarm can be left in the box overnight but if so, you should undo the sheet and make sure there is a good opening to provide ventilation. And then do up the sheet again. You'll also find the bees quickly start to build comb in the box so don't leave them for more than a day.

Set up a bottom board (floor) with a box of foundation and put a running in board down in front of the new hive to act as a ramp up to the entrance.

Remove 3 frames from the centre and pour the bees into the hive. Quite a few will remain in the box, and then shake the bees out of the box onto the running board in front of the hive entrance. Before long some of them will find the entrance and start fanning, attracting the rest into the hive. Next, put the frames back. Don't push them down. Just place them on top of the pile of bees and they'll gradually sink down under their own weight with a little assistance on your part to ensure they settle onto the runners properly. Once all the frames are in place put on the hive mat and roof.

The alternative is to pour the bees on to the running board and watch them march into the hive. This is quite spectacular.

It is preferable to hive a swarm on foundation rather than old comb. This is because a swarm makes such a good job of drawing it out and they consume the honey they have brought along, removing the chance of AFB spores infecting young larvae when they arrive.

Sometimes swarms abscond. This can be minimised by placing one frame of honey and one frame of brood in the box.

Ensuring the swarm is healthy and protecting your existing hives

Swarms are normally fairly healthy but ideally isolate them for 3 months away from your other hives. Obtaining honey the first year will not be a priority but building up a healthy hive is. Treat for Varroa as the hive they have come from may not have been treated adequately. Re-queen in the autumn as it may be the old queen that has been kicked out of the original hive and once swarmed colonies may be more susceptible to swarming. Inspect regularly.

Advice based on an original article written by Malcolm Roe (1996) and modified by the Dunedin Beekeepers' Club members (2014-2017).