Megan Seymour's Talk on Swarm Prevention February 15th 2012

Bees swarm naturally - it is their way of reproduction and increase.

Several days/weeks before swarming, they start preparations by searching for a suitable site for the swarm to inhabit. Then they start preparations for swarming in earnest and produce queen cells.

In early spring, say April if the weather is good, check that the queen is laying well. To prevent the colony from swarming you will need to separate the queen and flying bees from the brood and worker bees, giving them a new brood nest, which is just what happens when bees swarm. The idea is that the flying bees will be so busy building a new home for their queen that, hopefully, they will forget all about swarming.

Megan suggests that if we have **strong** colonies in April, as a matter of course we give the bees a new brood box to move into. (She added that if the colony is small then do not give it lots of room in this way, especially if the weather is cold, or they will not be able to keep the brood warm enough to survive.)

She demonstrated this method of Swarm Prevention:

- 1. Move the brood box, which is full with queen, brood and bees to one side.
- 2. Put a clean brood box, complete with floor and entrance in its place.
- 3. Find your queen in the old box and move the frame she is on into the new box and fill it with frames of foundation.
- 4. Put a queen excluder on top of this box to keep the queen in there. The flying bees will return to this site, build new comb and the queen will now start to lay her eggs in her new home. The bees will support her and the new brood in the usual way.
- 5. You now put the old brood box back on top of this new box together with its supers, cover board and roof. The queen excluder will keep the queen down in the new box and the house bees will continue to raise the brood already laid in the top box. The honey stores in the supers are still there ready for them to feed to the brood.
- 6. Continue to inspect the bees as usual. In 21 days the brood in the old box will have emerged and now is the time to remove the box.
- 7. Cut the old wax out from the frames; you can burn the wax if it is very black or extract it and trade it in.
- 8. You are now left with the brood box of new comb, complete with laying queen, new brood and lots of bees.

What to do if you can't find the queen

At Step 3 shake all the bees from the original brood box into the gap in the comb in the new brood box. Do this carefully as although workers don't mind being shaken the queen does not like it. It is best to brush the bees off any comb with queen cells as that is where the queen is most likely to be. Then put on the queen excluder and proceed as for Step 4 above. If you do find any queen cells on the combs and want to save them to put in a nuc then be careful not to shake these combs; queen cells are easily damaged and the queens will not hatch out.

Different types of queen cells.

Megan explained that there are several types of queen cells and not all are related to swarming:

Firstly there are play caps which appear in all our colonies and it is best just to leave them be. These are the familiar shallow cells that are the precursors of the large acorn shaped queen cells proper.

Next there are supercedure cells that you find on the face of the comb, few in number, when the colony decides to replace an old or failing queen. Once hatched the two queens live amicably side-by-side until the new queen is established.

Emergency queen cells are built when the colony finds itself without a queen. They are often to be found in an arc on the brood comb because the bees choose several day old larvae and build up the queen cells on top of the original worker cells, as a result they tend not to be as large as queen cells built for swarming.

Queen cells proper are usually found in large numbers along the bottom edge of the brood frames, often tucked into corners or hidden in holes in comb and sometimes difficult to spot.

Once you find Queen cells with eggs or larvae you know the colony has made preparations to swarm. So when the cell is capped you know that in five days they will be off with the old queen, leaving the capped cells to hatch out into new queens in another 8 days.

This situation requires immediate Swarm Control measures. Look in your books and ask an experienced beekeeper for help as you will need to create an artificial swarm to stop the bees from swarming.