Swarming. Its Control & Prevention, by Snelgrove 1934. Some adaptions.

User experience over the years since the Snelgrove Board was invented has allowed some refinements and alterations to the instructions originally published. For instance, the timing of entrance manipulations has proved to be fairly flexible and the insertion of the board can take place at the time of the reordering of brood boxes without the original three day delay.

Method 1 – For colonies with no queen cells

Method described for a National hive but works the same for all single wall hives. WBC needs a few more modifications.

End March/early April: as the colony builds in the spring add a super over a queen excluder in the normal way (Fig. 1).

Late April: if not already on double brood box add second brood box with foundation/drawn comb ABOVE the brood, but under the excluder (Fig. 2). Rearrange brood frames by moving two frames with brood to the centre of the upper brood box and replace in the lower box with two empty frames, placed at the sides of the brood nest. This encourages the bees to draw out or utilise the newly introduced space in the new box. Having wax to draw and vacant cells to lay up represents an incomplete nest which helps to inhibit swarming. This will usually postpone any swarming urge until late May.

Key

Empty comb or honey store

Brood comb

Pollen comb

Stores: pollen and honey

Queen and her comb

Snelgrove board

QX

Late May: Lift brood Box A to top, putting all brood frames in Box A except for queen frame, *a little* unsealed brood on one frame and a frame of stores, which stay below. If easier, Box A can be left in lower position and frames moved individually, according to the distribution of brood.

At the completion of each manipulation distribution of frames will be as shown below.

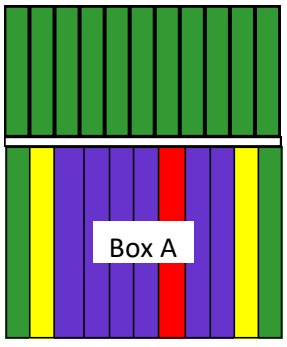

Fig 1 Late March/early April

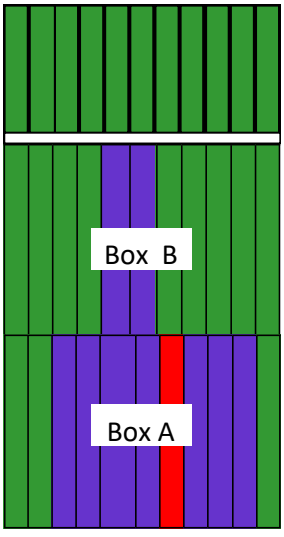

Fig 2 Late April

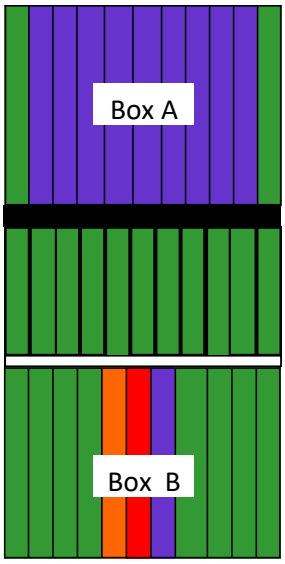

Fig 3 Late May

If clean, drawn comb is unavailable foundation may be used. Drawn comb is beneficial in early spring. Foundation is beneficial in late spring when young bees are more plentiful and swarming urge is increasing.

MANAGING SNELGROVE BOARD DOORS/WEDGES

Day 1: Place Board with openings at left, right and rear. Front aspect sealed.
Box A goes on top. When Snelgrove board is first inserted, open upper left entrance. All others closed. Foragers put into top box at transfer can thus return to lower box via original front entrance.

Day 4: Close upper left; open bottom left. This transfers new bees flying from top box into the lower box. Check if QCs being developed in upper box. **If found,** decide whether to:

- take out QCs *and adhering bees* into nucs. Remove whole box if all frames distributed elsewhere. Additional young bees may need to be added to sustain nucs, especially if staying in same apiary.

OR

- divide top box into two or three compartments by the insertion of bee-tight division boards, each with a QC and bees. Open upper doors/wedges for entrances to each compartment. Bees flying from top box will gravitate towards top right as this has been their habitual entrance for the last few days. Emerging brood may need to be added to the middle and/or left compartments to supplement bee populations while queen mates. These frames can be taken, without bees, from another healthy colony.

OR

- remove ALL QCs bar one or two and allow queen to mate from the top box. Open rear entrance for this mating flight so no danger of returning queen being distracted into the lower entrance. Once happy that the new queen is satisfactory you can remove old queen and amalgamate with bottom box, thus ensuring no loss of bees for the main flow.

If no QCs found open top right door and continue to manipulate the doors as follows

Day 7/8: Close bottom left.

There is now no danger of new QCs being started in the top box as there are no longer suitably aged eggs/larvae. Once all brood has emerged from the top box without raising QCs the two brood boxes can be brought together in a standard double configuration. Should QCs be started subsequent to the bringing together, adopt Method 2, which follows.

In these instructions right may be substituted for left and vice versa provided the same process is followed throughout.

There are several advantages to using this method.

1. Warmth from below helps the queenless colony in the top box.
2. Bees tend to fill the super between the two colonies which means any nectar will more than likely be stored as honey in the super and not the brood box.
3. Colony pheromone permeating whole stack eases introduction of any queen raised above, although a newspaper amalgamation is still advisable.

Method 2. For colonies in which queen cells are found

Snelgrove suggests a manipulation along the following lines.

On a double brood box configuration place a frame of sealed/emerging brood in the lower box, along with all the broodless combs. If there are too few combs to fill the box, use foundation. NO eggs or young larvae from which a QC could be made.

Into the upper brood box go the queen, queen cells and all remaining brood. If there are too many occupied brood frames to fit in the box add the surplus to another colony *without any adhering bees.* If any QCs are sealed, destroy, or transfer to another use. Snelgrove board goes under the top brood box with top left door open. Super(s) go under Snelgrove board.

After 4 days close top left and open bottom left entrance, transferring returning bees from top to lower box. At the same time open top rear or top right entrance. If raising and mating a queen from the top box the top rear may be the best as it is opposite to the lower, main, entrance. This minimises the danger of a returning, mated, queen getting distracted and entering the wrong box.

Generally, the loss of the flying bees into the queenless and broodless bottom box will cause the bees in the upper box to break down the queen cells they had started. Assuming this is the case, after 14 days the top box can be brought down to amalgamate with the lower brood box and the queen rejoin the foragers. This may cause a renewal of the swarm intention in which case the process can be repeated and a new queen raised in the top box, this time protecting selected QCs.

If QCs are to be distributed amongst other colonies this should be done around Day 10 post manipulation, when the queen pupae are around 14 days old.

In all cases beware of removing too many bees from top box in case robbing sets in.

Unfortunately, it is possible that the queenless foragers in the lower box will detect and try to join the queen above, undoing one's good work. For this reason a modification post Snelgrove is to leave a couple of frames of eggs and young larvae in the lower box allowing the foragers to raise emergency queen cells. This acts as a sufficient magnet to prevent the foragers going above to rejoin their old queen. Having bought this time one can then remove these emergency cells prior to reintroducing the original queen brought down from above. This MUST be done by Day 11 or there will be a danger of a virgin queen emerging in the lower box. However these QCs also represent a choice: they can be used within your management plan, (nuc, Apidea, requeening a difficult colony), or destroyed prior to the reintroduction of the old queen from above, or preferred if the old queen is dispensed with at amalgamation.

CAN'T FIND THE QUEEN

For either method if the queen cannot be found one can ensure she is in the appropriate box by shaking ALL the bees from ALL the combs into the target box prior to arranging the frames as desired. Provided the nurse bees can get to the brood and foragers can exit the box and find the original entrance, each will quickly return to their task. If nurse bees need time to get to the brood wait an hour or so before inserting the Snelgrove board to effect the division. This will be enough to re-

populate the brood frames. For this shaking and sorting process it helps to have a spare (i.e. 3rd) brood box into which all the bees can be deposited prior to adding the frames you intend to be left with the queen.

Two beekeepers working together helps one get it right, quickly, and careful planning is essential. Although somewhat extensive processes, they can save your honey crop if managed well.