

Our Beekeeping method on the island Terschelling (Netherlands)

Preface

During the SICAMM conference in Finland in July 2018 a lot of people asked about the method we use to replace our queens, control varroa and how we prepare our beehives for harvesting honey in July and August. We have now used this method for a long time and we are very satisfied about it. We have to note that this method is suitable for our island (Terschelling) where honey can be harvested in April and May (willow honey), in July and August (statice honey) and in August and/or September (heather honey).



Figure 1 Statice

The method is based on the following assumptions:

- As little intervention as possible in the hives
- Swarm prevention as close as possible to a natural swarm
- No selection on the best queens for honey, but average based on how to handle normally (not aggressive)
- Spare queens
- Brood break to reduce the amount of Varroa mites

Our method will be explained from spring to autumn in steps, including a description of the intervention done by us. For your information; I have 27 hives at the moment (2018) and 20 spare hives which we'll sell after the winter. We have island bees and we don't import other queens or colonies of bees.



Figure 2 Beehives in my nature garden in May collecting willow honey

Monthly steps

March

In March the hive is reduced to one brood box and old frames are removed. Then we check whether the queen is still laying well and check the amount of frames with brood. If it's less than four frames we unite 3 hives into two and divide the brood and the bees of the middle hive over the two remaining hives and place them next to each other (otherwise the colony is too small to collect honey). We search for the queen and mark her; this is relatively easy because the colony is still small. One wing can also be clipped to prevent the queen from swarming. Check the amount of food. If it's not sufficient Apifonda can be set on top of the frames. At the start of the blossoming of the fruit trees and the willow we add a honey super and queen excluder.

April

When the colony starts to grow we remove old frames and insert new ones. Check hives regularly for the amount of brood and pollen. In our experience when the amount of brood is increased to approximately 8 frames, the colony may be planning to start swarming. This can be prevented by removing frames with brood from the hive and replace them with new frames.

May

At approximately 15th May an artificial swarm is made. A new brood box with new frames is needed. The marked queen is removed from the original brood box and placed in the centre of the new brood box on a frame with open brood from the original brood box. Two frames of bees are also brushed off into the new brood box. Then the new brood box is placed on the original bottom board with a feeder on top (this is to stimulate the bees to build new combs).

There are two options depending on the space available in the bee stand. The original brood box and honey super is placed on a new bottom board next to the hive, or we can place a separator (a wooden frame with wire mesh where the bees cannot pass through) and an entrance, with the possibility to put a piece of plywood at the bottom (see figure 4) on top of the brood box with feeder. This separator needs a closed bottom, because the bees in the original brood box on top have to feel queenless and produce emergency queen cells.

To stimulate building every 2 days a litre sugar water (0,5 kg sugar and 0,5 litre water) is added in the feeder of the new brood box on the original bottom. (Note the overall feeder in Figure 3. If you don't have these a feeder inside an eke or empty super will do. *R.P.*)

The following will happen during the next days; the bees who leave the beehive from the original brood box (now on the top) will return in the new brood box on the original spot, all the new frames of the new brood box are built very fast, because the queen has to lay eggs, like in a natural swarm. Because there are not a lot of young bees the balance in the colony is disturbed and swarming fever will not occur for a while.

When all the brood on the centre frame is sealed in the new brood box most varroa mites are in this brood. So if this is removed and replaced by a new frame, the amount of varroa mites reduces dramatically, the frame can be put in the freezer -18 degrees Celsius or feed it to the birds.

In the top brood box the number of bees will reduced dramatically, and they will produce emergency queen cells.

Thirteen days after the artificial swarm the first queens are ready to emerge in the top brood box. We select one queen cell and remove the other queen cells for spare or, when checking at the end of the day, you can also release them (known as "pulled virgins" *R.P.*) in the brood box and only one will

survive the night. Most of the times the bees have arranged this themselves. This cannot be guaranteed so it's better to check, otherwise a queen may leave with a swarm.

Note; depending on the spare food in the top brood box and honey flow this box may need to be fed also.

June/beginning July

In June the bottom brood box is checked for queen cells, but this does not normally happen before 4 or 5 weeks after the artificial swarm. In the meantime, the new queen is fertilized. When there is sealed brood, the hives can be united in the following way: we remove the feeder on the bottom brood box and open the bottom of the separator (see figure 4). We put it back and a connection is made between top and bottom through the wire mesh in the open separator, but the bees stay separated. Keep this situation for at least one day. Now the marked queen is removed from the bottom brood box with two frames and is placed in a small hive with some extra bees. Then it is transported at least 5 miles away. The separator is removed and the boxes are united. If the original hive is placed next to a new hive remove the marked queen and put only the new box on the old box separated with newspaper with small holes. Bees will eat the newspaper and are united. Now it's one hive with a lot of brood and bees ready for honey collecting.



Figure 3 Hive with bottom board, brood super, feeder, separator, brood super and honey super and roof

If the queen is not fertilized and has drone brood, wait a little and if it does not change remove the upper brood box 20 meters from the hive and shake all the bees in a rooftop, uncap the drone brood and place the brood box under the new brood box with the marked queen. Bees in the rooftop will fly back to the hive with the queen and this colony is also big enough to collect honey. Be aware that these colonies are sometimes wanting to swarm later.



Figure 4 open and closed separator

July/August

In August the bees are collecting honey and there is no need for intervention. In the meantime the small hives are fed every 2 days with 0,5 kg sugar and 0,5 litre water. When the frames are completely filled, add one or two new frames and this colony will have 10 frames at the end of August and can be used as a spare colony.

August /September

In August when the hives are filled with honey and the static has withered and heather starts to flower, the hives are transported back to the house stand and the static honey is removed. The hives are reduced to one brood box and a queen excluder and the extracted honey super is placed on the hive again so the bees can start collecting heather honey.

September/October

When the heather season has finished, the honey supers are removed and the honey is extracted. After that start feeding sugar water, about 15 kg sugar water (9 kg of sugar and 6 kg of warm water). Also narrow the main entrance against robbing, mice and birds.



November

Steam old frames and uncapping wax, use this to make new comb foundation. Repair frames etc.

Conclusion

This is the way we try to keep our bees healthy and collect honey, this does not mean it cannot be done differently, we encourage you to change the method which suits your own situation.

I hope It improves your bees, honey crop and fun of beekeeping

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10-9-2018 Terschelling West

This article has been printed off Dave Cushman's website. <http://www.dave-cushman.net/>