

EVERYTHING REVOLVES ROUND THE QUEEN BEE*by Wim Somsen [518]*

We have asked the vice-secretary of the Somsen Foundation, Wim Somsen, to tell something in our magazine about his beautiful hobby: beekeeping.

Every teacher feels good when he or she can pass down knowledge. This also goes for Wim. He is a teacher of biology, physical education and career's teacher at a comprehensive school. You may find him making the border area unsafe on his racing bike, he also plays music and into the bargain he is an enthusiastic member of a choir.

Wim tells about his colonies of bees:

Beekeeping as a hobby

Living in the country coincides with having outdoor hobbies. In 1983 we moved from a new housing development to a cottage in the country in De Heurne. One day I read in a local paper that a beekeeper's club was organizing a course for starting beekeepers. There would be a number of theoretical classes and also practical training from an experienced teacher in bee culture and afterwards you would get a certificate and also a colony of bees as a reward. I really felt like it!

Now, some eighteen years later – having four to seven colonies – I should know everything about bees, but unfortunately, I am regularly surprised by something unexpected, something strange, something I don't understand. At the same time this is a fascinating element in beekeeping and I would like trying to convey some of this thrilling element.

At the course I learnt that it works well to keep the bees in some sort of half open shed. So before I really started I asked my brother if he was willing to design and build a shed at an attractive price. I think he succeeded pretty well (see picture). The fact that we found this shed totally collapsed after returning home from a holiday some years later, didn't have anything to do with its quality, but was due to a cyclone which also uprooted some big trees in the neighbourhood. By amazing good fortune nothing had happened to the bees.

Now when I am writing this it is 15 February and it is a sunny day with temperatures of around ten

degrees centigrade. On such days you can see the bees becoming active again outside the hives for the first time after a long winter break. They are flying on and off quite industriously and in each colony I see bees returning with colourful lumps of pollen on their little hind legs. For me this is a sign that they have survived the winter well

and that it is almost sure that there is a queen in each colony that has already laid her first eggs and this implies that there is a breeding nest.

One big clod of bees

How do the bees actually survive the winter? Well, they do not hibernate, but when it gets very cold they stick together into one big clod of bees, thus keeping each other warm. One condition is that they need sufficient food for the winter because keeping their temperatures at a certain level requires a lot of energy. Therefore they have to eat regularly. The beekeeper sees to it that in autumn each colony gets about twelve to fifteen kilograms of sugar in liquid form. The bees, in turn, will store this in the combs in solid shape. Bees can stand a cold winter perfectly well. By regularly changing places they take care that it never freezes inside the clod of bees.

Today, now that the weather is finer, the flying bees bring in pollen and nectar from the flowering snowdrops, the crocuses and the pussy willows. The funny thing is that by the colour of the pollen you can tell which flowers they visited.

Everything revolves around the queen bee in a colony. Now when the first pollen is brought in she will gradually dedicate herself to her main task: laying eggs. At first not so many yet, but in spring this will increase to over as many as a thousand eggs a day. The queen can be easily recognized among the other bees because of her big abdomen, which is completely constructed for the production of eggs. A number of ladies in waiting see to it that she won't be short of anything and simply cram her with food so that she can fully concentrate on laying eggs. These ladies in waiting are worker bees. They are females just like the queen but their sexual organs have not developed. In their sometimes very brief lives they look after the affairs in a bee

swarm. They start taking care of the young larvae, which come out of the eggs after three days. Afterwards they take care of the cleaning of the combs or the guarding of the entrance against foreign intruders. They end their lives as flying bees to get pollen and nectar or to fetch water. In the high season this work is so heavy that they can last for only about three weeks. Then they will be exhausted and they die.

Drones die the 'love-death'

In this period there is also a third party in the swarm, the so-called drones. They are the males. They look a bit plump and while flying they make a buzzing sound that is a bit heavier. It is their one and only duty to inseminate the queen in the late spring during her so-called wedding-trip. Several drones enjoy the favour of inseminating the queen and die immediately afterwards. A beautiful but hard death. For the rest the drones are hanging around in the hive all summer, fly their daily round if the weather permits and allow themselves to be fed by the worker bees and by the end of the summer they will all be chased out of the hive: the so-called slaughtering of the drones.

A strong colony may comprise as many as forty to sixty thousand worker bees in the high season. The buzzing sound around the hives is enormous then, bees are flying on and off, the smell of honey is hanging around the bee-house and the beekeeper is rubbing his hands. Of course it will always remain a hobby but it is great fun when it is possible to obtain honey from the combs at least twice a year.

A swarm flies out

Since the queen produces so many eggs in spring the colony will grow rapidly. So it may happen that toward the end of May I suddenly discover a large swarm of bees hanging from a branch of a tree just in front of my bee-house. And if I happen to be a witness of the bees swarming out it is absolutely fabulous for me! In masses they try to get out of the entrance and start flying around the bee-house like mad. The buzzing can be heard from far away. After some time they calm down again. The thousands of bees gather in a very big clod hanging from a branch in front of the bee-house.

What is the use if this swarming out? The old queen feels it is getting too busy in the hive. She stops laying eggs and as a result becomes more mobile. After a couple of days she will leave the hive and about half the population will follow her. Meanwhile a process is going on inside the hive to see to it that there will be a new queen. Some young larvae get special food so that they will not develop into infertile worker bees but into fruitful new queens. When I see to it that I get the swarm out of the tree in time and put them into a new hive I will have an extra new colony in a natural way.

Real beekeepers take the queen out of the colony before the swarming starts and they put her together with a few thousand worker bees in a new hive. This is called making an artificial swarm. The original colony takes care that there will be a new queen and the old queen is satisfied in her new hive and will usually not swarm out anymore. I also work this way but sometimes it is very difficult to find the queen in a big colony. In that case I just wait until they start swarming out. That is also very thrilling.

A couple of times a year I take a look inside the hives to check if the colonies have survived the winter all right, later to find the queens and later again to take away the honey from the bees that they have collected so industriously. I usually wear a veil and have a pipe nearby. Still I hardly ever wear gloves, which sometimes results in a couple of stings. In the long run you will get used to this, but the first time when I got stung in my hands I still felt it after three days. One colony is quieter than the other, which depends on the race. At the moment I am working with *carnica* bees and they are rather quiet.

Bees with identification number

Many beekeepers travel around with their colonies. In spring they go to the blossoming fruit-trees, later to the flowering cole-seed in the polders or to the heath at the end of the season. My colonies stay at home, the yield is a little less then since the bees have to go to some more trouble to find nectar. In spring my honey consists of a mix of fruit-tree blossom and dandelion honey.

In summer it is a combination of the yields of the lime-tree and of all the gardens in Dinxperlo. My bees can cover any place within a radius of five kilometres.

It is clear that the average ages of beekeepers in The Netherlands are increasing. Also because of the notorious *varroa* disease many beekeepers stopped their hobby in the past. For our American readers I mention another bee disease: the so-called *American 'foul brood'*. This disease is very infectious and fatal for a colony of bees. In spite of all these troubles it remains a very interesting hobby. It takes quite some time. I used to tell people that all my bees have a personal identification number and that I check every night if they have returned home in time.

Of course honey is a very healthy product and it is obtainable with me as long as the stock lasts. This year's stock has already been sold out. Anyone who would like to know more about beekeeping is always welcome in De Heurne, because there is a lot more that I can tell about it. ©