

## More Around Bees

From the old fortress Athens in Attica, the most direct and indirect information on bees has been kept. The bees were tamed in the earliest times. They lived in hives made of osier, wood, and clay. The first two types were not found in archeological sites as they could not endure that long. From Herodotus, as from Pausanias, we learn that in the 7<sup>th</sup> century BC, hives were made of wood. They also tell us that the king of Corinth, Kypselos, had been hidden by his mother when an infant in a cedar hive, and took his name from there. As for clay hives, a lot is known.

In ancient Greece, beekeeping was practiced not only for honey but also as it was the only sweetener; was and propolis were also used for therapeutics purpose. And then, the hive and its funny little animals was intended as an example to people, who also wanted a society governed by complicated rules and very well organized.

Many tell about how things were. In Attica, the best honey was produced. Describing a proud man on Hymettus mountain, Theophrastus said that although very tight, he would send "Hymettus honey to Rhodes" to please friends, not because there was no honey there, but because the Attica honey was famous and a precious gift. From Pausanias we find that the special quality of honey was due to the rich vegetation of Hymettus mountain, to the savory and other aromatic herbs. Strabo says that Hymettos honey was good, but that the honey near the silver mines in Laurium was even better, as it was not smoked: "they call it not smoked because of the way it is produced". Without much explanation, later on Plinius would write: "Honey harvested by smoking hives is affected by this procedure and at the slightest contact with dew becomes acid". Therefore, according to him, the best honey was not smoked. Then and now this statement is considered in a way erroneous. Smoking hives with cow dung was always practiced and continues to be practiced as a way to fight bees' aggressiveness. But this type of "smoking" is one, and the need to "smoke" "on fire" is another. When in antiquity it was about small amounts of honey, for personal use, honeycombs were left to drip slowly into an osier basket, separated from one another by reed. For larger amounts, for sale, honey was obtained by pressing the honeycombs, but then the honey was mixed with impurities (larvae, dead bees, pollen). For these impurities to rise to the surface and be easily removed, honey was put "on fire" and "smoked". Greeks would call not smoked honey "honey without fire". In Thracia also, the same name for the honey that was not heated would circulate: "not smoked honey".

The first honeycombs, in Attica, were presented to the gods. The rest were kept for friends and for the honey producer himself: "When the white honeycombs were cut, we were glad, seeing Attica honey dripping from them", an author says.

The Buxaceae honey, as ancient authors say, had an unpleasant smell and a slightly bitter taste. This honey was obtained in Asia, Scythia, on the shores of Ponts and Corsica, in large amounts, and the honeycombs were so full that the cells could not be distinguished one from another. The Trapesunth honey, on Pontus Euxinus, was described to have strong smell and would upset the minds of the healthy people, but would heal the epileptics.

Hippocrates (463-377 BC) recommended honey both to the sick and to the healthy. Doctor Dioscoride, who lived in the 1<sup>st</sup> century AD, in his book *About Medicine*, made the following classification, based on the quality of honey according to its source: firstly the Hymettus honey, then the Aegean Sea honey, then the Sicily honey called "hyble", being produced in Hybla city. All this honey was very aromatic, light in color, very good and sweet. Discoride talks about the antiseptic properties and the special role of honey in healing wounds and skin lesions. A prescription of his consisting in a mixture of honey and salt

used in throat wash would calm coughing and cure colds. He would also recommend honey in a great number of diseases.

In antiquity, the preserve quality of honey was appreciated. First of all, honey was a powerful anti-decay agent and was used in embalming. Herodotus, Xenophon, Diodorus wrote about it. When a certain important person died far from his fortress, the body was placed in a coffin filled with honey and would be transported to Greece to be buried. Xenophon says about a certain Agesipolis: "he died, was put into honey and brought for royal funerals". Diodorus refers to a warrior on his way back home, who died in Cyrene "and his body was put into honey and brought to Sparta where royal honors and funerals took place".

Greeks had a great influence especially on the Romans in this field.

In the Roman Empire, beekeeping was as developed as in Greece, probably thanks to the proximity of the two and to the connections between their inhabitants.

Among those who left us written documents about the beekeeping practiced by the Romans are: Varo (116 BC), Virgil (70 BC), Pliny the Old (23 BC) and Columella (1<sup>st</sup> century AD).

In Vari's *Rex Rustica*, it is written about wooden hives of rectangular shape (about 1m/35cm). He tells us Archelaos's epigram on the birth of bees from oxen's dead bodies.

Virgil's *Georgics* is not a practical book; it brings nothing new, repeats everyone's opinion, admires bees' hard work, and insists on their social life. This author dedicates a separate chapter to Aristeus.

Pliny is the supporter of the idea that books are written on books. His work *Naturalia Historia*, written after Aristotle's *History of Animals*, includes the opinions of Greek authors in the field. It is very interesting the example of a Roman noble man who installed on his territory some transparent hives, made of special glass, to penetrate bees' secret.

Finally, the agronomist Columella wrote the first practical manual of beekeeping collecting all the information until then from the Greeks.

He noticed, second to Aristotle, the *loca*, the rarest disease of bees, due to unknown causes, then he talks about dysentery, that appears every year and is attributable to bees' visitation of euphorbia flowers whose nectar contains toxic substances. Quoting Aristomahos of Cyprus and Filiskos of Tasos, he says that to combat the *loca*, all honeycombs attacked by the disease are cut, and all the contaminated colonies are eliminated from the aviary. For other diseases, he recommends a infusion of rosemary and pomegranate with a little red wine.

Of course they were reserved about some of these methods, because they had not tried them personally, but found them written by Hyginus, who had been interested in beekeeping.

About the first concerns in beekeeping in other areas but Greece, we find out also from Greek authors. Pyteas, a brave sailor and geographer, from the Greek colony in Marseille, visited in the 4<sup>th</sup> century BC the North-Western coast of Europe, Germany and Denmark, where he had a drink made of honey. A recent discovery confirms it. Honey was currently used in the area, even before Bronze age (1500 BC). In the tomb of a young woman discovered in Ectev, a village in Denmark, next to well-preserved items of clothing, a birch wood small glass was found with traces of mead prepared from strawberries and linden tree was found.

Pliny says that in Germany he saw a hive of about 2.5 meters, close to the camp of the Roman general Drusus, on the Rhine valley.

However, Strabo tells us that in the British islands, in the prehistoric era, bees lived in the wild. In the Thule islands, probably Iceland of today, besides wheat, honey was produced “out of which a drink was made”.

Herodotus also tells us about North Africa: Tunis, and Libya, where great amounts of honey were made.

About beekeeping in Scythia, North of Pontus Euxinus, Pausanias writes. Despite the fact that they were not sheltered in hives, bees were very mild, he says.

In Midya, between Middle East and Persia, honey, according to Euripides, was dripping from the trees: “From trees in Cyteron sweet drops fall”. Strabo confirms: in Armenia and Midya bees gather in swarms in the trees of whose branches honey drops fall.

According to Diodorus, in Corsica a very high production of wax and honey was obtained. He says that the population on the island fed on honey, milk and meat. There ownership right was of the one who found a swarm in a tree first.

During Roman occupation, in Greece, the interest in bees' life was less.

The need for manuals on bees made a few authors become active in this respect: Vintanios Anatolos with his *Collection of agricultural matters*, Didymos with his *Georgics* in 15 volumes, Vassos Kassianos who signed *Collection of agriculture* with chapters dedicated to bees, and chapters based on pervious writings of other authors. As regards this last book, no progress in knowledge is recorded, on the contrary, the author is a victim of ignorance and superstition.

Irrespective of how things were, it is very clear to us that beekeeping, no matter on which meridian, started to become an economic branch. As Mohamed said: “Bee is like a person with faith, if you accompany him, he is useful to you; if you are in his company, he is useful; if you ask for advice, he is useful. Everything about him is useful. As with the bee.”

MARTA GIOGIA