

## Honey and Bees Assembly

This morning I'd like to share some thoughts about familiar things that, when we look at them closely, become wonderful and strange. This morning, I will concentrate on bees and honey, but part of the point is that I could have chosen pretty much any subject. Whatever topic we chose, if we look at it properly, I argue that its innate wonder will shine through.

The word *honey* in English is ancient. It entered the language before 900AD, and it is related to the Old English word *hunig*. Our Germanic roots are shining through here, as the German word for honey is closely related – *honig*. Other European languages take a different route, following on from the Greek – *melis*. The Greek word for a bee is now used as a girl's name – Melissa. In a similar vein, in English you might well use the word *honey* for a loved one. From the Greek *melis* come the Latin *mel*, and close behind comes the French and Spanish – *miel*.

Honey and bees were important to the ancient peoples of Europe and the world – the honeybee is found on every continent apart from Antarctica and honey has been a foodstuff for as long as there have been people.

Imagine a world without sugar. A world without sweets or sweet drinks. Imagine that if you wanted to taste something sweet, you had to go to the bees for it and forage their honey.

Here is a picture of someone doing just that.



This is a cave painting from Eastern Spain and we think it is 8000 years old. It is quite stylised but you can make out a tree. Halfway up the tree is an intrepid climber. With one

hand he reaches into a hole in the trunk to extract honeycomb; in the other hand is a container to store the precious honey. Unsurprisingly, the bees are not pleased and are buzzing round him. He will be very badly stung but will be admired by his people for bringing home the honey – so much so that they painted him, allowing us to look at him this morning, 8000 years after his death.

It wasn't just the natural sweetness of honey that they prized in ancient times. It was also what else you could do with it. For one thing, you could make mead or honey wine. Mead is possibly the world's oldest alcoholic drink. We know it was drunk as long ago as 9,000 years ago and is almost certainly very much older than that. When you weren't having a tippie, you might light your way to bed with a beeswax candle.

It also turns out that honey has many medical benefits. Of course, we know it is very nutritional. Further, honey is naturally antibacterial and anti-inflammatory. This means it can be successfully used to treat burns and other skin wounds. And there is so much more. It is full of antioxidants, which can protect against premature aging, type 2 diabetes and heart diseases. One of your parents might put honey in a warm drink to soothe a persistent cough; if you get hayfever, I hear that eating honey made locally to where you live can help with the symptoms.

Evidence of the world's love of honey is scattered through folklore and myth. In Greek mythology, bees were supposed to be the messengers of the gods and honey to be a source of wisdom and poetry. The gods of Olympus lived on nectar and ambrosia - honey and honey wine. Honey gave them immortality. Three bee-maidens with the power of foretelling the future supported Apollo's oracles – no wonder his propheticess at Delphi was also called a bee. Honey was offered to the Greek gods from Mycenaean times, who also buried their dead in beehive tombs.

The link between the honey and the dead goes back a long way. Do you remember that one of the properties of honey is that it is antibacterial? That gives it unique powers. Honey is the only natural substance in the world that never goes off. Archaeologists dig up honey that is thousands of years old and can spread it on their toast the next morning. And it isn't just honey that never goes off – anything stored in honey is also preserved for ever. That is what made people, thousands of years ago, invent honey burials.

According to the Greek historian Herodotus, who lived about 2,400 years ago, the Assyrians used to embalm their dead with honey. A century later, Alexander the Great's body was preserved in a honey-filled sarcophagus. What a glorious way to travel into eternity – soaked in honey.

We don't have too many European myths involving honey, but we do have the old custom of 'telling the bees'. This tradition requires the bees to be told of important events, such as births, deaths and marriages. If the bees were not told they might become angry and fly off. Sounds a bit silly, but it still goes on. After the death of Queen Elizabeth II, the Royal Beekeeper, John Chapple, faithfully informed the bees of Buckingham Palace and Clarence House.

Bees are as astonishing as the wonderful product they make. Each bee will produce less than a teaspoon of honey in her short life. Bees are social insects, like ants and wasps. Their hive is best described as a superorganism. That is a short word to describe something incredible.

There are different types of bee. The queen lays the eggs and is looked after by the worker bees, all of whom are female. They are the bees you see when they go out to forage for the

nectar and pollen they need. The males are the drones. Pretty much their only job is to mate with the Queen – they do no other work except to flap their wings to cool down the hive if it is getting too hot. Each of these types of bee needs the others to exist. They have to operate as a single team. People sometimes think that the queen is in charge, but she is not. If she is not laying eggs well, the worker bees will kill her and replace her. Every single bee exists only in terms of the hive as a whole. It might be better to think of a hive, an anthill or a wasps' nest not as a collection of thousands of individual insects, but as a single creature – a superorganism, perhaps even a hivemind.

Apart from their gift of honey, bees are critical pollinators of plants. Without them, everything would fall apart. They pollinate 70 of the around 100 crop species that feed 90% of the world. If bees were to become extinct, we could lose all the plants that bees pollinate, all of the animals that eat those plants, and so on up the food chain. Bees are the rock upon which our world is built. They need our help, as populations are falling. Hives are falling victim to the varroa mite and are harmed by the use of pesticides.

What a journey we have been on – from a sip of sweet honey, to hiveminds and a threat to the natural world we rely upon. Honey and bees are wonderful. But they are not uniquely special. Everything, looked at in the right way, is special. Go deep enough, and everything is wonderful.