Waitrose Weekend Magazine 24th June 2010



Why we need our bees

Waitrose announces a £67,500 donation to the University of Sussex to support vital research into the health of the honeybee.

Bees are central to food production. As an essential agent of pollination for a vast array of plants, without them much of agriculture would be impossible.

There were around a million beehives in the UK at the turn of the last century but this number has now dropped to 280,000. A decline in the number of beekeepers, plus diseases and the intensification of agriculture have all played a part. Some 97 per cent of herb-rich meadows and 20 per cent of herdher moorland have been lost since the 1950s, while use of more efficient pesticides has led to fewer flowering weeds in the fields. The money that Waitrose is donating will

be used to fund research being conducted at the Laboratory of Apiculture and Social Insects (LASI), headed by Dr Francis Ratnieks, the UK's only professor of apiculture, at the University of Sussex. It will go specifically towards supporting a PhD student for three years and an undergraduate Junior Research Associate Bursary for three summers.

As well as looking at the effect of the British countryside on the bee, the research, led by LASI team member Dr Margaret Couvillon, will be decoding waggle dances to determine where honeybees are foraging. Professor Ratnieks explains: 'The waggle dance is a set of movements that bees use to communicate with their nestmates about profitable food sources. By studying the dance, we work out how far the bees must travel to meet their nutritional needs. The longer the dance, the further away the food source is. The further the bees must fly for food, the more energy they use.' Alan Wilson, technical manager

Alan Wilson, technical manager (agronomy), Waitrose, says: 'From this project we hope to ensure that farming, including organic farming, is not inadvertently carrying out any practices that could compromise bee life. With a better understanding of the habits of bees, we hope to influence our suppliers to manage their land appropriately.'

Carolyn Rastall, technical manager, (ambient), adds: 'Working with our honey suppliers and their contacts at the Bee Farmers' Association we hope to increase the number of hives on our suppliers' land, while also improving biodiversity on farms and increasing the availability of British honey.'

THE HONEYBEE: VITAL STATISTICS

The estimated amount of revenue that bees bring into the UK economy.

Honey bees pollinate 90% of our apples, 40% of our runner and dwarf beans and 30% of our pears and raspberries.

The number of worker bees it takes to gather the pollen from around 2 million flowers to make 1 lb (450g) of honey.