Honeybee deaths reaching crisis point

• 1 in 3 of UK's honeybees did not survive winter and spring
• Pollination of fruit and vegetables at risk

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Britain's honeybees have suffered catastrophic losses this year, according to a survey of the nation's beekeepers, contributing to a shortage of honey and putting at risk the pollination of fruits and vegetables.

The survey by the British Beekeepers' Association (BBKA) revealed that nearly one in three of the UK's 240,000 honeybee hives did not survive this winter and spring.

The losses are higher than the one in five colonies reported dead earlier this year by the government after 10% of hives had been inspected.

The BBKA president, Tim Lovett, said he was very concerned about the findings: "Average winter bee losses due to poor weather and disease vary from between 5% and 10%, so a 30% loss is deeply worrying. This spells serious trouble for pollination services and honey producers."

The National Bee Unit has attributed high bee mortality to the wet summer in 2007 and in the early part of this spring that confined bees to their hives. This meant they were unable to forage for nectar and pollen and this stress provided the opportunity for pathogens to build up and spread.

The BBKA says the causes are unclear. Its initial survey of 600 members revealed a marked north-south divide, with 37% bee losses in the north, compared to 26% in the south. "We don't know why there is a difference and what is behind the high mortality," said Lovett.

The government recognises that the UK's honeybee hives - run by 44,000 mostly amateur beekeepers - contribute around £165m a year to the economy by pollinating many fruits and vegetables. "30% fewer honeybee colonies could therefore cost the economy some £50m and put at risk the government's crusade for the public to eat five portions of fresh fruit and vegetables a day," Lovett warned.

The Honey Association warned last month that English honey will run out by Christmas and no more will be available until summer 2009. It blames the shortage on fewer honeybees and farmers devoting more fields to wheat, which has soared in price but does not produce nectar.

The UK's leading honey company is so concerned by the crisis that it has pledged to donate money to
honeybee research. From next month, for each jar of Rowse English honey sold in supermarkets 10p will be donated to a fund dedicated to improving the health of the nation's honeybees.

Stuart Bailey, chairman of Rowse Honey said: "We are working with the UK Bee Farmers' Association and are sponsoring research to the minimum value of £25,000 over the next 12 months to selectively breed a hardier bee that can better withstand parasites and diseases."

Rowse's clear English honey comes mainly from the borage plant, also known as starflower, which has been grown increasingly as a source of a fatty acid rich in omega-6 for pharmaceutical products. But farmers have planted much less borage this year as ready-processed borage oil is being imported and wheat is more profitable to grow due to the increase in demand for biofuels.

Bailey added that the shortage had been exacerbated by an 11% rise in demand for English honey over the last year.

Although British honey only accounts for 10% of the 30,000 tonnes of honey consumed in the UK, other major honey producing countries have also been severely hit by poor weather and bee diseases. Argentina is the world's honey pot, producing up to 75,000 tonnes a year - three times that of its nearest rival Mexico. But Argentina has suffered a 27% drop in yield due to droughts and the planting of huge swathes of land with soya beans for biofuel. As a result, there has been a 60% rise in the price of raw honey.

In the US, honey yields have been decimated by honeybee losses of 36%, many due to colony collapse disorder (CCD), a mysterious disappearance linked to the blood-sucking varroa mite, lethal viruses, malnutrition, pesticides, and a lack of genetic diversity. CCD has spread to Canada, France, Germany and Italy but has not yet been confirmed by government in the Britain.

The BBKA is calling on the the UK government to put £8m over five years into researching honeybee losses and improving bee health.

Farming minister, Lord Rooker, has predicted the demise of the honeybee within a decade. Last November, he told parliament: "We do not deny that honeybee health is at risk. Frankly, if nothing is done about it, the honeybee population could be wiped out in 10 years."

Yet the Department of Environment, Food and Rural Affairs (Defra) spends just £1.3m on bee health each year - less than one per cent of the bees' value to the economy - with an additional £200,000 for research.

The National Farmer's Union said it was essential for government to increase its funding of honeybee research. "Research is vital into varroa, bee breeding and the Nosema parasite," said Chris Hartfield, NFU horticultural adviser. "We are talking about food security and world food supplies being put at risk."

Defra said a further £90,000 had been allocated to the NBU this year to expand investigations into colony losses. It is currently consulting on a honeybee health strategy, with responses required by the end of this month.

A Defra spokesman said: "Significant public funds are already provided to support this area of work but to ensure this intervention is effective, it is vital that work is driven by a well thought out strategy agreed by all relevant parties."

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