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Honey bees in US facing extinction

By Michael Leidig in Vienna

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Albert Einstein once predicted that if bees were to disappear, man would follow only a few years later.

That hypothesis could soon be put to the test, as a mysterious condition that has wiped half of the honey bee population the United States over the last 35 years appears to be repeating itself in Europe.

Experts are at a loss to explain the fall in honey bee populations in America, with fears of that a new disease, the effects of pollution or the increased use of pesticides could be to blame for "colony collapse disorder". From 1971 to 2006 approximately one half of the US honey bee colonies have vanished.

Now in Spain, hundreds of thousands of colonies have been lost and beekeepers in northern Croatia estimated that five million bees had died in just 48 hours this week. In Poland, the Swietokrzyskie beekeeper association has estimated that up to 40 per cent of bees were wiped out last year. Greece, Switzerland, Italy and Portugal have also reported heavy losses.

The depopulation of bees could have a huge impact on the environment, which is reliant on the insects for pollination. If taken to the extreme, crops, fodder – and therefore livestock – could die off if there are no pollinating insects left.

In France in 2004, the government banned the pesticide Fipronil after beekeepers in the south-west blamed it for huge losses of hives. The manufacturers denied their products were harmful to bees. Polish beekeeper associations claimed that the losses in their country could be connected to cheap sugar substitutes used in mass honey production.

However, experts at the largest honey bee health company in the world, Vita, based in Basingstoke, said the cause was still unknown, and therefore neither was the cure.

The company's technical director, Dr Max Watkins, said: "If it turns out to be a disease we will probably find a cure. But if it turns out to be something different, like environmental pollution, then I do not know what can be done.

"At the moment, all we know is colonies are dying and we simply don't know why. It could be a new disease or a combination of factors. And of course it could turn out what we are seeing here in Europe is different to what has been reported in America, although at the moment they look very, very similar."

Dennis van Engelsdorp, of the Pennsylvania Department of Agriculture, said: "Preliminary work has identified several likely factors that could be causing or contributing to CCD. Among them are mites and associated diseases, some unknown pathogenic disease and pesticide contamination or poisoning."

Initial studies of dying colonies in America revealed a large number of disease organisms present, with no one disease being identified as the culprit, van Engelsdorp added.

German bee expert Professor Joergen Tautz from Wurzburg University said: "Bees are vital to bio diversity. There are 130,000 plants for example for which bees are essential to pollination, from melons to pumpkins, raspberries and all kind of fruit trees – as well as animal fodder – like clover.

"Bees are more important than poultry in terms of human nutrition. Bees from one hive can visit a million flowers within a 400 square kilometre area in just one day.

"It is not a sudden problem, I has been happening for a few years now. Five years ago in Germany there were a million hives, now there are less than 800,000. If that continues there will eventually be no bees."

"Bees are not only working for our welfare, they are also perfect indicators of the state of the environment. We should take note."