

Check your understanding



1 Bees are really awesome. Why are they so important for us and the world?

Answer

Bees are one of the most important pollinators for the food crops. They pollinate the majority of all flowering plants and many food crops. By helping out plant reproduction, they create food and habitat for other animals, increasing biodiversity. Bees pollinate billions of dollars worth of food crops every year, thus helping to maintain global food security. This makes them a key species in the global food web. They also make honey, which is a good source of energy for us and many animals (bears, badgers, etc.) and has lots of health benefits.

2 The pesticides called neonicotinoids are a threat to bee populations. How do bees get these pesticides?

Answer

Neonicotinoids are systemic pesticides. Once the plants or seeds are treated with it, this pesticide circulates into all tissues of the plant, killing pests that feed on the plant. Nectar and pollen of these plants also contain neonicotinoids. When bees harvest nectar and pollen, they consume the residues of neonicotinoids, carry it back to their hive to make honey and also feed it to their babies.

3 Scientists found that honey still contains neonicotinoids despite their ban in the European Union. How is that possible?

Answer

When plants or seeds that received neonicotinoid treatments are planted, some of the neonicotinoids leach into the soil, contaminating it. Plants that are planted in contaminated areas take up the pesticide from the soil.

4

What are the negative effects of neonicotinoids on honey bees?

Answer

These type of pesticides damage the nervous system of bees, affecting their ability to learn and remember. Bees, which can fly up to 7 km away from their hive, don't know how to return and die. Also, these pesticides weaken the bees' immune system, making them more vulnerable to diseases and parasites.

5

Bees and other insect pollinators are very important for the global food chain but their populations are declining fast. What are some of the reasons? And how could we help?

Answer

Loss of habitat, toxic pesticides, diseases, parasites, pollution, climate change are some of the reasons that bee population decline.

Ways to help:

- Plant bee friendly flowers and plants, set out water for bees
- Support eco-friendly farming by buying produce from smaller, local, organic farms
- Supporting local beekeepers who would take good care of their bees
- Don't use toxic pesticides (or buy plants or seeds that have been treated with them)
- Support scientific research by participating in citizen science projects about pollinators