

## THE RELATIONSHIP BETWEEN HONEY BEES AND THE ENVIRONMENT

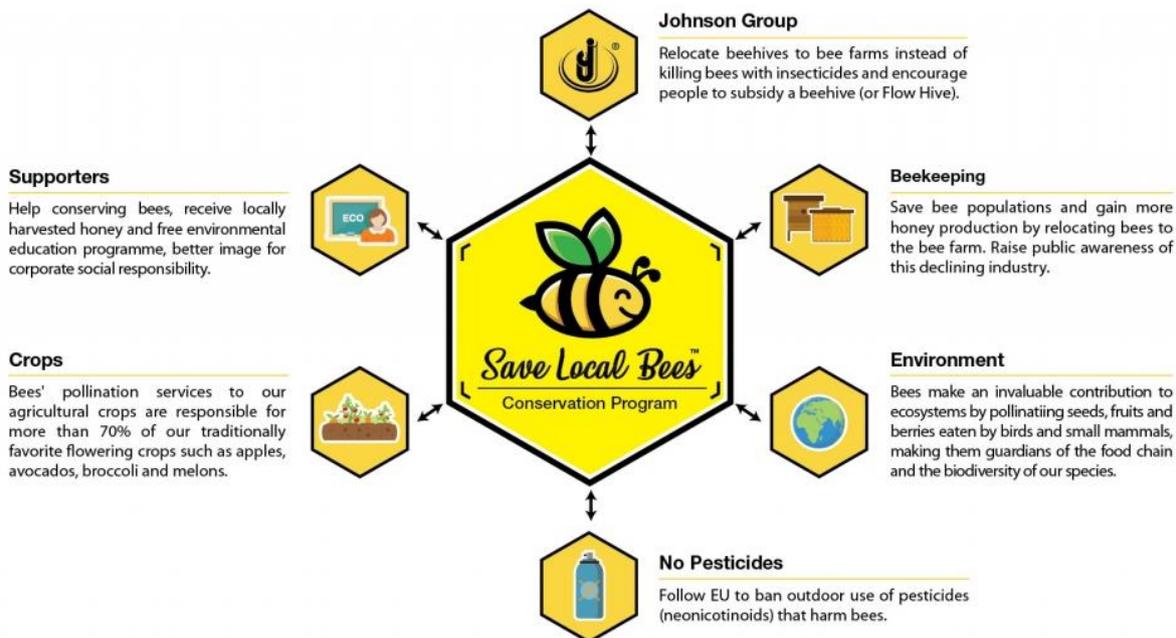


### Pollination

Plants germination require the transfer of pollen from the male part of the flower (the anther) to the female part (the stigma). The bees move from flower to flower in search of nectar, they leave behind grains of pollen on the sticky surface, allowing plants to grow and produce food.

Bees pollinating billions of plants each year, including millions of agricultural crops. Without them, many plants we rely on for food would die off.





**1 BEE COLONY CAN POLLINATE 300 MILLION FLOWERS EACH DAY**

**BEES POLLINATE FRUITS, NUTS, AND VEGETABLES**

**BEES POLLINATE ABOUT 90% OF THE WORLD'S NUTRITION SUPPLY**

An unprecedented study integrating data from around the globe has shown that honey bees are the world's most important single species of pollinator in **natural** ecosystems and a key contributor to **natural** ecosystem functions.

Because bees are in danger

There is also a significant threat against bees from our changing land use. As cities grow and agriculture becomes more intensive, bees are losing the wild spaces, hedgerows and meadows where they can find flowers and food. An estimated 97% of wildflower meadows disappeared from England and Wales between the 1930s and 1980s; this has contributed to a profound impact on our wildlife, including bees.



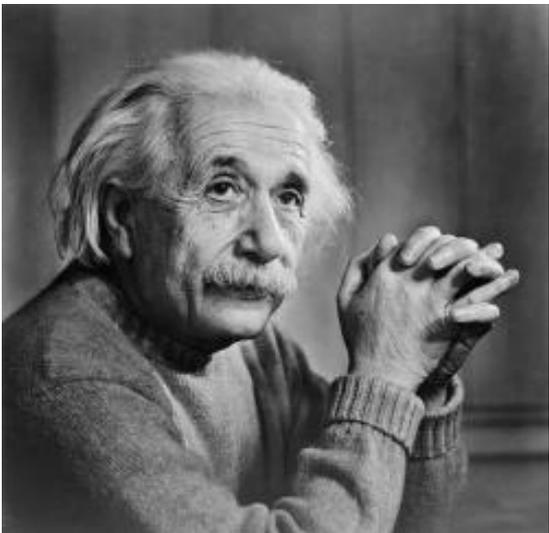
We have unfortunately lost many flowers from the landscape to growing cities, new roads and intensive agriculture. This has left the bees scrambling to find enough food. Many bee species have declined and two bumblebee species have even become extinct in the UK since 1940.



## WHAT ARE NEONICOTINOID INSECTICIDES

Neonicotinoids are a group of insecticides with a chemical structure that is similar to nicotine.

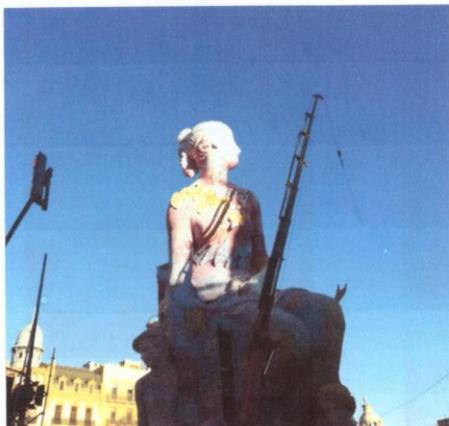
They are more selective (e.g. they have greater toxicity to insects than to mammals), and are less harmful than most older classes of insecticides. The most widely used neonicotinoid insecticide, imidacloprid, is less toxic to people than caffeine, and about twice as toxic as ibuprofen. It's very dangerous for the bees.



Einstein used to say: "If the bee disappeared from the face of the earth, man would only have four years of life".

## “BEECOME” ERASMUS PLUS PROJECT ( SPAIN)

The penultimate day from our arrival in the host families in Valencia, Spain, we got up, as usual, at 6 o'clock and after having breakfast we went to school by bus. At school we saw some presentations made by each participating State at the Erasmus project, including ours. Then of the Spanish boys played the hymns of all participating states and the Valencian one. Then we went to Valencia by bus, the journey lasted about two and half hours. In Valencia we went to the theatre, where they offered us a breakfast with butter sandwiches and almond milk, then again the presentations were projected. After the theatre we went to the centre of Valencia, there were the Falles, popular festivals in honour of “Sant Josep”, declared world heritage for



the UNESCO. In Valencia there was the main Falles, the name derives from the construction of enormous characters of paper mache, that burned on March 19<sup>th</sup>. At 2 p.m. they blew up firecrackers like every day. At lunchtime we had a pic-nic in a park with sandwiches offered by the school that hosted us. After lunch we continued our visit to Valencia and saw other small Falles. The thing that surprised me was the narrowest house in Europe, five floors high and as wide as the entrance door. When we returned home, me, my correspondent Jorge and other Spanish boys, that were participating in the

Erasmus project we went to a mall in the city of Xàtiva, city of my correspondent Jorge, there was a large outdoor area, where we played football. We returned at home late and we had dinner around 10 p.m. Jorge's mother made Russian salad, clams, chips and sandwiches with ham and salami. Jorge's parents were very hospitable and welcoming, I immediately felt at ease with the family that hosted me and with all boys and people I met.



The narrowest house in Europe



Plaza de Toros (Valencia)



Evening in Xàtiva