

The United Nations in partnership with the Goethe Institute welcomes you to the screening of

"VANISHING OF THE BEES"



"A film for anyone who likes to eat"

Imagine half a million adults skipping their houses and leaving their children behind. Picture an opened suitcase filled with bundles of cash at a bus stop and yet no robber wants to snatch it. The apiary science mystery known as "Colony Collapse Disorder" displays these very symptoms. Not only do the bees abandon their hive but the queen and the brood as well. Unnatural. Unheard of. Even the predators that usually raid the hive for honey stay away. At first, this occurrence sounds like an urban legend or an exaggerated tale. Except it's not. Bees are disappearing all over the planet and no one knows why.

Since this nearly year-long investigation first began, thousands of beekeepers around the globe have come out of the bee yard, and admitted to the same problem, with some reporting losses of more than 90 percent of their colonies. And there are no dead bees to be found. It is estimated that CCD has resulted in the death of more than one quarter of the 2.4 million bee colonies in at least 35 states across the U.S.

The film looks at the CCD from the viewpoint of the beekeeper, as well as from the perspective of hard science, while keeping in mind the mythical spirit of the honeybee.

Mr. Dennis Van Engelsdorp, Penn State University (Pennsylvania), expert on the decline of bees. He has coordinated working groups on the Colony Collapse Disorder in USA. He has published numerous scientific reports. Today, he is one of the main experts on bees decline in the world. Contact: dennis.vanengelsdorp@gmail.com

Philippe Lecompte, President of the Bees Biodiversity Network and organic professional beekeeper in France, he was behind the first areas of fallows land dedicated to apiculture. When, in 1992, the Common Agricultural Policy (CAP) meant that 10% of cultivable land was to be set aside, he was already dealing with the phenomena of the weakening and increased mortality of his colonies. Observing the changing management of our land, he became aware that it was increasingly difficult for bees to find in the environment sufficient food to maintain their immune defences. Today, thousands of hectares are set aside by the farming sector for the improvement of the nutrition of bees. Contact: phillipe.lecompte@jacheres-apicoles.fr







Bees under bombardment, worldwide

More than a dozen factors, ranging from the decline of flowering plants and the use of memory damaging insecticides to the world-wide spread of pests and air pollution, may be behind the emerging collapse of bee colonies across many parts of the globe. Scientists are warning that without profound changes to the way human-beings manage the planet; declines in pollinators needed to feed a growing global population are likely to continue.

- New kinds of virulent fungal pathogens, which can be deadly to bees and other key pollinating insects, are now being detected world-wide, migrating from one region to another as a result of shipments linked to globalization and rapidly growing international trade.
- Meanwhile an estimated 20,000 flowering plant species, upon which many bee species depend for food, could be lost over the coming decades unless conservation efforts are stepped up.
- Increasing use of chemicals in agriculture, including 'systemic insecticides' and those used to coat seeds, has been found to be damaging or toxic to bees. Some can, in combination, be even more potent to pollinators, a phenomenon known as the 'cocktail effect'.
- Climate change, left unaddressed, may aggravate the situation, in various ways including by changing the flowering times or plants shifting rainfall patterns. This may in turn affect the quality and quantity of Nectar supplies.

See more UN Environment Programme's (UNEP) findings in *Global Bee Colony Disorders and other Threats to Insect Pollinators*.

Vanishing European Bees

Bees are vanishing across Europe, especially in mountainous regions, because of the *varroa*, an invasive and parasitic bee species. *Varroa*, first introduced to Europe in the 1980s, is ravaging and significantly weakening colonies. As a result, bees have become susceptible to other parasites (including *Nosema Ceranae*, viruses) which take advantage of weakened beehives spreading rampantly as the beehives are weakened, and complicating our intervention & possible solutions.

What can you do?

At home: Bee-friendly gardening

Brighten up your garden with some bee-friendly flower seeds. Plant wildflower seeds in your garden, patio pots and window boxes to provide essential nutrition to the bees. Growing your own vegetables and fruit helps bees, the environment and puts healthy food on your table. Nothing beats the taste of a home grown tomato, carrot or apple! Planting a fruit tree suited to your climate can yield delicious apples, pears, oranges, and other fruits year after year and the best thing is that they are all free! Source: http://www.vanishingbees.com/gardening/

At work: Simple land layout adaptation

Farmers and non-farmers alike can make simple land layout changes and other minor adaptations to land management that will help save our bees. The bee crisis has been developing for some twenty years and we need to act now on the ground through actions that promote biodiversity to ensure healthy hives, and indeed a healthy and economically viable economy, especially in horticulture and agriculture. Small modifications to areas will allow bees to gather nectar and can contribute on average up to 66% of their pollen nourishment needs.

More information: Bee Biodiversity Network

Organizations such as the Bee Biodiversity Network (BBN) have measured the effects of reorganising the layout of agricultural spaces on promoting bee immunity. The BBN recommends hasty action to expand on initiatives such as

- bee food havens
- intelligently-managed hedges to promote proper flowering
- nectar plant cross-plantings
- nectar and pollen plan plantings (rapeseed, sunflowers, etc.)
- grass-covered strips managed to promote pollen-producing plans (list of authorised species to be expanded, in particular for vegetables)