

Disappearance of the bees – What's the impact ?

For many people around the world, the potential impact of colony collapse disorder is difficult to fathom (**sonder**).

The loss of fruits, vegetables, even forage crops (**récolte**) is essential for meat and dairy cattle (**bétail**).

Basically flowering plants evolved (**évoluer, progresser**) with these and so they need each other in order to survive (**survivre**) (0:20)

So without bees or any of the insect pollinators, you won't get any fruits and you won't get any vegetables. What you are left with are all the plants that are wind (**vent**) pollinated unless (**à moins que**) you can hire hundreds of thousands of people to hand pollinate these crops (0:35).

Southern Sichuan province in the rural county of Honey Wong pears are the local calling (dans ce cas : **vocation**).

Pear orchard (**verger**) carpet the mountains down to the foot of the valley. And in the center of town the pear goddess bestows (**accorder**) an eternal blessing on the yearly harvests (**culture**). It seems to work (1:07).

Honey Wong produces 80% of the pears in the region. Each year in August the trees hang heavy with fruit. Individually wrapped (**enveloppé**) before harvest to protect it from insects.

A typical family will harvest around 5 tons of pears (1:29). But it isn't bees farmers have to thank for the abundant crop. The bees here disappeared long ago. In the early 1980s uncontrolled use of pesticides wiped out (**éliminer, liquider, anéantir**) the local bee population and killed off the pollinating plants that feed them (1:55). Fruit production plummeted (**dégringolé, chuté**) and local farmers watch their livelihood vanish before their eyes (2:07).

Speaks in chinese.

I wrote a letter to Beijing and they wrote back and said you have to hand pollinate because the insects used to do it but they've been killed off by pesticides. So now you have to do it.

Now each year in April farmers must play the role of honey bee and it's not as easy as the bees make it look (2:39). They start by collecting and preparing the pollen by hand. They scrubbed (**frotter, recurer**)

They start by collecting and preparing the pollen by hand. They scrub the anthers (**anthères**), the male part of the flower for their pollen. And dry it for up to two days. When the pollen is ready the human pollinators go to work (3:03).

Dr. Tan Yan from Sichuan university has been studying the pollination process used by farmers in Honey Wong. Today he has come to see the fruits of their labor.

Speaks chinese.

When I first heard about this, I didn't believe it. This is work normally done by nature by bees (3:40).

With nothing more than a stick of bamboo and some chicken feathers farmer Kochii Yuan conjures up (**évoquer**) the fuzzy body of a bee (3:50). With a dip of pollen a light touch is just enough to pollinate the blossoms.

Every Spring hundreds of workers take to the trees and pollinate the pear flowers blossom by blossom. A hive (**ruche**) of bees can pollinate up to three million flowers in a single day. A human can only pollinate up to 30 trees. It's a painstaking (**méticuleux**) and expensive substitute for a service that bees once provided for free (4:38).

Speaks chinese.

I wish it would go back to the natural state. I wish the bees would come back because this is a really difficult situation for us.

To replace honey bees with human pollinators in the United States would cost more than 90 billion dollars a year and even here in Honey Wong hand pollination may not be sustainable (**durable**) for long.

For farmers doing hand pollination it's still feasible. But now China is changing very fast.

Most of the young people are heading to the city. I think in not such a long time 10 to 20 years hand pollination will be very difficult (5:31).