



# **World Bee Day**



**20 MAY 2023**

**When you see a bee, what goes through your mind?  
Do you see it as a mindless creature,  
programmed by nature, rather like a robot, to  
instinctively pollinate flowers and make honey for us?**



**Or do you see a bee as a creature with emotions  
and intelligence, capable of suffering, and  
absolutely essential for their role in  
providing the food we eat?**

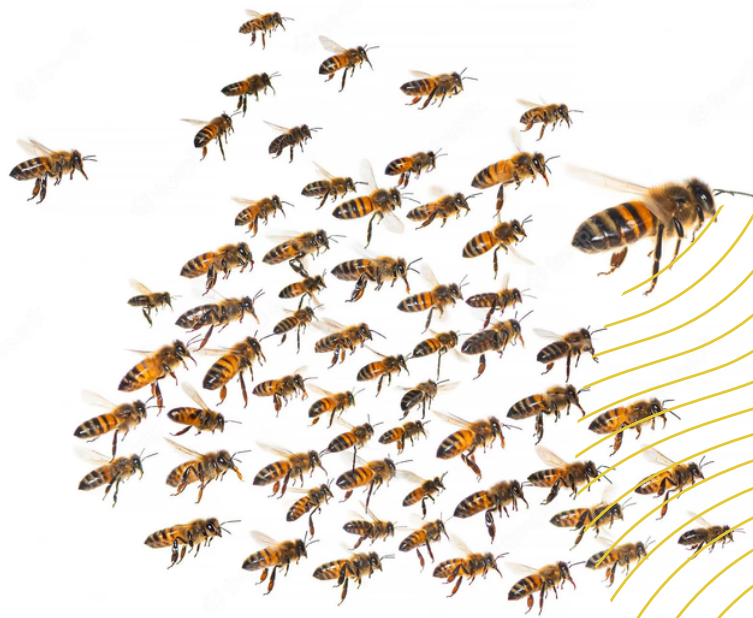
**Modern technology is sophisticated enough now such that a growing number of scientists are saying that bees are so sentient, and so callously exploited by the agricultural industry, that they should be included in animal welfare regulations.**



**Let's take a step back and ask why this small insect is so important to our own survival?**



**The answer is that a huge proportion of the food we eat depends on the pollination of flowers. Without pollination, we would not be able to produce fruit, vegetables, nuts and grains. And although scientists have tried to reinvent the art of pollination by creating mechanical bees and developing plants that self-pollinate, their efforts are simply no match for a swarm of bees.**



**Even more humbling is that the miraculous little creature we call a bee has a brain the size of a poppy seed (or a pin-prick) and yet it experiences complex emotions, and conducts tasks that require significant intelligence.**

**Not only must they harvest pollen and nectar to feed themselves, but enough to support their colony. They must memorise landscapes and make quick decisions in a constantly changing environment.**



**Bee emotions identified by scientific research in the last two decades include:**

- *Optimism*
- *Frustration*
- *Playfulness*
- *Fear*
- *The unpleasant emotion associated with suffering*



**Scientists say that this changes the way we should think about them.**



**We should acknowledge that industrialized factory farming which trucks millions of closed hives for vast distances to pollinate massive fields of monocrops, is causing bees enough stress to be responsible for their current demise by the billions.**



**Stress is a killer and bees are stressed!  
Scientists now say that agricultural practices  
must become bee-friendly so that bees do  
not experience the spray of pesticides, and  
can forage, not on monocrops, but on a  
diversity of crops grown regeneratively.**





- **So next time you see a bee floundering in the dog's water bowl, or trapped by a closed window, jump to the rescue.**
- **If it is stuck in a bowl of water, offer the bee a leaf or twig to climb on, then set it down on a plant outside, in order for it to recuperate.**
- **If a bee is stuck by a closed window, carefully trap it by placing a glass over it, then slip a piece of paper between the window pane and the glass to keep the bee in the glass while you get to the door to set it free.**
- **Don't use pesticides on garden plants**



# BEE FRIENDLY



**IS THE NAME OF THE GAME!**

## ***Topics for class discussion...***

- **An understanding of pollination**
- **An understanding of the meaning of SENTIENCE?**
- **Which of the Five Freedoms are not given to bees even though they are essential to the production of our food?**
- **Which emotions do we share with bees?**
- **Ethology as a career choice – research and class discussion**





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**We thank world-renowned ethologist *Jonathan Balcombe* PhD for alerting Nature-based Education to the awesome article on bees, published by *The Guardian* newspaper, on which this lesson plan is based.**

**[www.jonathan-balcombe.com](http://www.jonathan-balcombe.com)**

**<https://www.theguardian.com/environment/2023/apr/02/bees-intelligence-minds-pollination>**