

## 'Save the Bees' Lesson Plan



### Suggested NSW Syllabus Outcomes

**ST2-4LW-S** compares features and characteristics of living and non-living things

**GE1-2** identifies ways in which people interact with and care for places

**GE2-2** describes the ways people, places and environments interact

**GE3-2** explains interactions and connections between people, places and environments

**Sustainability in Schools Organising Idea:** 1, 2, 7, 9

### Suggested NSW Syllabus Content

- describe how living things depend on each other and the environment to survive, for example: (ACSSU073)
- develop a design solution for an identified need or opportunity, using a variety of tools and materials that considers factors such as sustainability and time (ACTDEK010)
- consideration of how a place can be cared for eg a park, farm, beach, bushland (ACHGK005)
- explanation of the importance of natural vegetation to animals and the functioning of the environment eg provision of habitats, production of oxygen (ACHASSK088)
- identification of ways people influence places and contribute to sustainability eg roads and services, building development applications, local sustainability initiatives (ACHASSK112)

### Goal

Read 'Save the Bees' by Bethany Stahl and learn about the important roles that bees play as pollinators and how he can help them.

### Resources

- 'Save the Bees' by Bethany Stahl
  - [Watch on YouTube](#)
  - [Buy on Amazon \(Amazon Affiliate Link\)](#)
  - [Visit Bethany Stahl's website](#)

### **Background information**

Pollination is a very important part of the life cycle of plants. It is the process by which plants reproduce and make more plants. Each flower contains both the male and female parts required to make new plants. Pollen must move from one part of the flower to another part of the same flower or to a different flower in order for a seed to begin to grow. This pollen may be moved by the wind (think dandelions), birds, insects or animals. People can also move the pollen, but it can take a long time to move the pollen by hand.

Plants use flowers and nectar (a sticky, sweet treat) to attract pollinators of all kinds. While the pollinators are drinking the nectar that is produced by the plants, they accidentally brush up against the pollen and get it all over themselves. After they have finished drinking nectar at one flower, they move onto another flower where some of the pollen falls off. This is how pollination occurs.

Bees play an important role in the pollination of a large number of flowering plants, some of which are important food crops for humans to eat. It is estimated that about one-third of global food production requires animal pollination and of that one-third, bees are responsible for 80 to 90 percent of it. In Australia, it is estimated that bees are responsible for pollinating between \$4 and \$6 billion worth of crops per year.

Unfortunately, bees are facing a lot of threats to their survival and in many parts of the world, bee populations are not in a good state. Studies have shown that bees are threatened by pollution, pesticide use, use of genetically modified crops, the devotion of large areas of land to monocultures and climate change, just to name a few. They also face the threat of diseases and pests that have the potential to wipe out an entire colony.

### **Activities**

1. Discuss the importance of bees and the threats to their survival
  - Information about pollination
  - The importance of bees
  - What threatens the survival of bees?
  - What happens if there aren't enough bees?
2. Read or watch "Save the Bees" by Bethany Stahl
3. Brainstorm solutions to the threats that bees face in the wild
  - Plant native flowers in our gardens and in pots to provide food for your local bee populations.
  - Create our very own bee hotels to hang up around your homes or at school.
  - Keep a hive of native, stingless bees in your school or at your homes to help increase the number of native bees we have in your area.
4. Answer the questions about "Save the Bees" below

## The WildLife Movement

### *Literal Questions*

1. What was the fluffy yellow stuff all over Clover?  
Suggested answer: The fluffy yellow stuff was pollen. It is what helps new plants grow.
2. What is nectar?  
Suggested answer: Flowers make nectar which is delicious, sugary food for bees and other pollinators.
3. Why is it hard for Clover to travel to and from her home to the beehive?  
Suggested answer: The more buildings, roads and parking lots that people build, the less space there is for flowers to grow / The bees have to travel further to find nectar and sometimes they travel so far they forget how to get home.
4. What kinds of flowers do Clover and her bee friends love?  
Suggested answer: Clover and her friends love sunflowers, lavender, marigolds, peonies and herbs.
5. What did Mateo and Jo do to help Clover?  
Suggested answer: Mateo created hanging pots from recycled plastic bottles and filled them with bamboo / Mateos family planted a herb garden / Jo's dad planted lavender plants around their porch / Mateo and Jo built a bee hotel for the bees to take a break between their homes and the flower fields.

### *Inferential Questions*

6. What important role do bees play in growing plants for food?  
Suggested answer: Bees are pollinators, which means that they play a crucial role in helping plants to grow and reproduce and create more plant babies. Without pollinators, there would be no more plant babies which means we would run out of food pretty quick.

### *Applied knowledge*

7. What is a bee hotel?  
Suggested answer: Bee hotels are a safe place for bees to rest and lay their eggs. They are made from very holey material or hollow branches, pipes or bamboo.  
[Watch this video](#) from The Wildlife Kate explaining how bee hotels work.

**Extension activities**

\* Note: These extension activities can help differentiate the lesson or provide students with additional activities to complete to lengthen this unit.

1. Make a list of the types of flowers and herbs that you can plant in your garden to help the bees in your local area.
2. Draw a labelled diagram of a bee hotel including information on what they are made from and how they are made.
3. Plant flowers or herbs in recycled pots or plastic bottles outside of your classroom or in your school garden.
4. Create bee hotels to hang around your school and at your homes for the bees in your garden.

Note: Pre-made bee hotels can contain pests and diseases and it would probably be better to construct your own bee hotels from sticks and materials that are found in your own gardens.