



# 25 min Pollination Patrol JK/SK Facilitator Notes

**Objective:** To learn about the importance of bees in the food system, looking specifically at pollinating apple blossoms. To build respect and awareness of the imperative role that bees have in growing our food.



**Recipe Category:** Food: “Outside the Box”



**Level of Difficulty:** JK/SK



**Cooking Time:** 25 min



**Recipe Ingredients:**

Introduction to Pollination:

- Picture of Pollinators Hard at Work
- Picture of bee anatomy

Activity: Pollination Party

- Bee costumes – head bands, baskets, tongs, yellow sparkly sponges, glasses, nylons, brushes, tubes, wings, lint brushes, toilet roll

Introduction to Apple Blossoms:

- Picture of Apple Tree in Bloom
- Bee on a stick



**Curriculum Links:**

Grade	Subject Area	Ontario Curriculum Links
KG	Science and Technology	Demonstrate an awareness of the natural and human-made environment through hands-on investigations, observation, questioning, and sharing of their findings. (O) <ul style="list-style-type: none"> <li>▪ I. Describe some natural occurrences, using their own observations and representations. (S)</li> </ul>

## **Introduction to Pollination: (3 mins)**

- Today we're going to be learning about some of the reasons why bees are so important for helping to grow our food.
  
- Who here has ever seen a bee? What do they look like? Are they friendly?
  - Sometimes bees can seem unfriendly, like when they sting, but really they're just very busy with a very important job!
  
- So, what is it that you think bees are busy doing?
  - Making honey - honeybees have to visit LOTS of flowers to make honey
    - *For teachers, this is 80,000 flower trips to produce enough honey to fill one jar!*
  - Collecting pollen
  - Feeding on nectar from flowers
  - Pollinating flowers to make food
  - A lot of our food depends on the pollination from bees.
    - *For teachers, one third of the human food supply*
  
- "Poll-in-a-tion" (practice saying together) – what's that?
  - The carrying of pollen (the yellow powdery stuff in flowers) from flower to flower or within the same flower (Show flower picture)
  - To fertilize (practice saying together) the flower, creating a fruit
  - A "Poll-in-a-tor" is an insect that transports pollen – like a bee!

*\*Show the picture of Pollinators Hard At Work*

So, without bees, the flowers wouldn't be pollinated and our food wouldn't grow!

## **Introduction of Apple Blossoms: (2 mins)**

Who here has seen an apple tree in bloom? Apple flowers are called 'blossoms'. Did you know... the flowers go on to become apples? (*Students that have rotated through the Roots and Fruits station should know this*)

*\*Show picture of apple blossom tree.*

For a flower to become an apple, the pollen that is produced by the flowers on one apple tree must be carried to the flowers on another tree. The pollen is moved between trees by bees and other pollinators like butterflies and birds, that visit the flowers to collect nectar (sweet liquid) and pollen.

*\*Ask two volunteers to be the trees with flowers, use the Bee on a Stick to show how the bee would go between the two flowers to pollinate them.*

What do we call the transfer of pollen from flower to flower again?

- *Pollination!*

So, even if you're scared of getting stung by a bee, they are sooo important to us, we can't live without them!

### **Pollination Party (15 mins)**

- Ask students, "Who here can show me what a bee looks like? Show me your very best bee impressions! Get your wings flapping, your bodies buzzzzzzing, maybe some antennae on the top of your head!"
- Ask the students to show you their bee legs, which should be straight forward. Ask students to point to their bee eyes, which should be easy. Ask students to point to their bee mandible! Wait, *what?* A bee mandible? Maybe that one is too hard, how about your bee proboscis! That sounds like a funny word! Do you think maybe we should learn about all of these parts?!

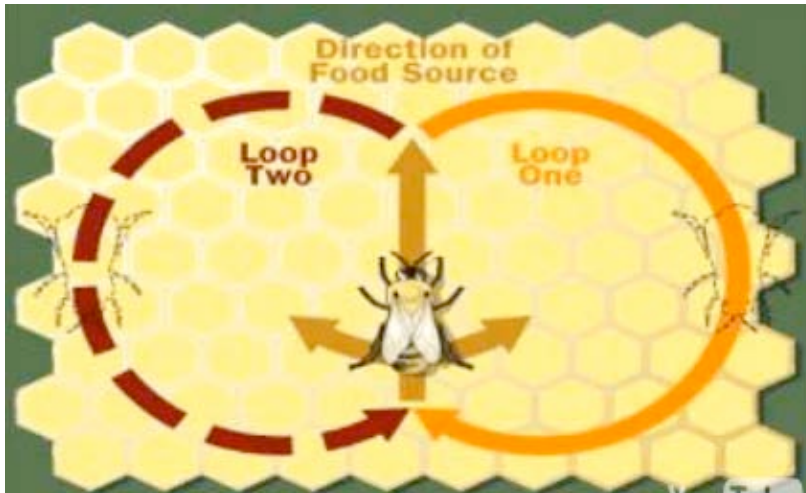
*\*Show the bee anatomy picture*

- Ask for two volunteers at a time to come up to the front. Starting with the antennae, ask students whether they know what it is, if not introduce the body part, have the students wear the part and explain what that part does for the bee.
- Ask for two new students and introduce the next body part.

Bee Part:	Description:	Costume Piece Suggestions:
Antennae	These help the bees to smell and touch.	Head Band
Fuzzy Hair	This hair acts like a magnet for pollen! <i>Kind of like when you stick a magnet to the fridge.</i>	Lint brushes
Eyes	Bees cannot see all the same colours we see – for example, they can't see red. But, they can see other colours we can't even see!	Glasses
Legs	Bees have 6 legs.	Nylons stuffed with newspaper
Pollen Baskets	Located on the back leg, to hold the pollen in place.	Baskets
Pollen Press	The hind legs press the pollen they've into pellets.	Yellow Sponges
Stinger	Only on girl bees. Stingers are used to protect themselves and are like tiny needles that fill with venom/poison. Once the bee stings, it will die.	Toilet roll
Mandibles	Next to the head and used for cutting, grasping, and releasing pollen, and also to protect themselves.	Tongs
Proboscis	Long hairy tongue used to bring liquid food to their mouth, including nectar, honey and water	Funnel and Tube
Wings	Two sets used for flying	Toy wings

(Everyone should have at least one piece of bee costume on)

- Lead a Waggle Dance! Waggle dances are how bees communicate to one another. They use speed and angles to show where the nearest or best food source is. You can lead a waggle dance in a figure 8 (Conga line-style) with the students.



- During the dance, you could sing this song: (call and repeat)

***Ohhh Waggle, Waggle, Waggle,  
Is how I talk to you.  
Waggle, Waggle, Waggle,  
I'll tell you what to do.***

***Now watch me very carefully,  
I'm wriggling with such power,  
That if you pay attention,  
I'll point you to the flower!***



## Serving Suggestions:

