



Sacred Heart - Growing Outside

Wednesday 23rd June 2021

Weather: Warm and dry

Growing Outside

Children:

Year 5

Bees and Pollination

Today, in *Growing Outside*, the first challenge was to think about what might be the most important visitor to the garden. After a few guesses, the children realised it's bees. We thought hard about why bees love our gardens so much. The children were able to tell me that they like to make honey. Sometimes, people can be mistaken and think that bees collect honey from flowers, but it is actually pollen and nectar that they collect. We looked carefully at a flower from the garden at school and searched for the pollen. The children noticed that it was brightly coloured to attract bees and could be found in the middle of the flower, surrounded by colourful petals.



I asked the children how they thought the bees carried the pollen from flower to flower or to the hive. Did they use shopping bags? Or wheelie suitcases? This was a very silly idea. The children were able to tell me that bees collect pollen on their furry bodies and legs when they land on flowers to collect pollen and nectar. If you're really lucky and see a bee up close, you can sometimes see

the pollen stuck to its legs forming a clump of yellow.

This is then taken (transported) to different flowers where something really special happens. When a bee lands on a flower, some of the pollen comes off its body and legs onto a sticky part of the flower, right in the centre. This is called the stigma, which is sticky. The pollen travels down the stigma, right into the centre of the flower where it then helps to produce (make) seeds. It is quite a tricky process to understand, so I



gave the children resources that would help explain it. The challenge was for them to work out how they were going to do this with a paper flower, straw, lollipop, bee cut-out and cheese puffs! After some discussion, they worked it out. A flower needs a stem (the straw) and a stigma (the lollipop). The cheese puffs were emptied into the flower to become the pollen and then the children demonstrated with the bee cut-out what happens during pollination. Their job was to collect some 'pollen' (cheese puffs) and pollinate the flower by making sure they left some 'pollen' on the sticky lolly 'stigma'. We looked carefully to see how much pollen had been collected.

Bees are always working, they really don't want to sting us at all, and if they do, they will die. They work hard collecting as much pollen and nectar from the flowers as they can, to feed themselves and the young bees, and in the case of honeybees, to make us lovely honey. Bees are tiny compared to us and are probably very scared of us, so we must stay still and quiet when we see one and not scream! Bees don't realise they are doing such an important job for us - pollinating. Without this, we would have no new plants. The children quickly realised that without bees, everyone would die as they'd have no food or oxygen. What an important job for such a little garden visitor!



Did you know that there are 250 different kinds of bees in the UK? Some of the bees make honey and others don't and they all look slightly different too.

Finally, we went off in search of bees in the school grounds, starting with the vegetable garden. There were so many on the purple flowers of the Sage, it was amazing watching them. We also spotted lots in the herb planters near the playground.



I was lucky enough to have a packet of bee pollen from a health food shop. Did you know it's a source of protein? It takes a bee a whole month to collect enough pollen to fill a teaspoon. No wonder they're called busy bees!

The children also discovered a few new facts about bees today. Bees don't sleep, they only live for six weeks, they can fly at 20mph and only the females sting.

A great afternoon Year 5. Well done.

Mrs Grainger