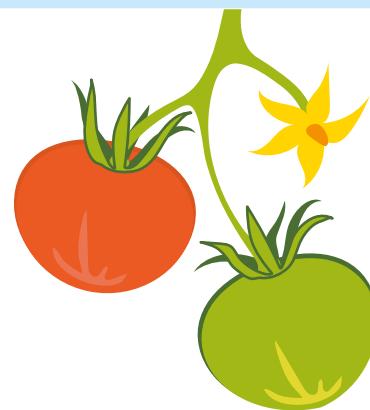


Pollination

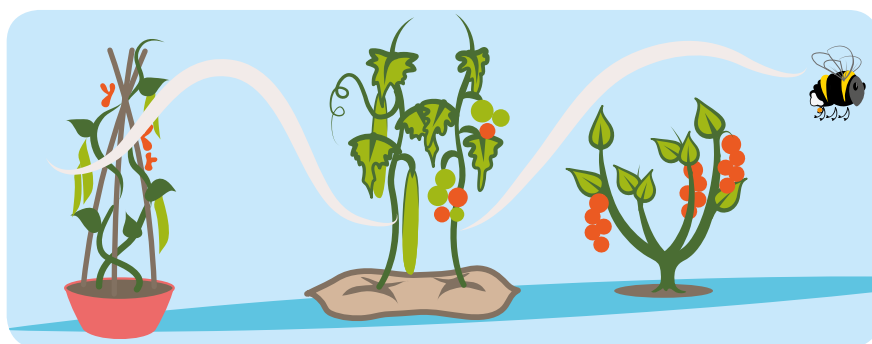
We are all familiar with powdery pollen, but what is it for? Pollen grains carry the male genes of flowering plants and they must find their way to the female parts of another flower of the same species for plants to reproduce. There are many insects which help to pollinate plants as they inadvertently transfer pollen from one flower to another whilst foraging. Plants then produce seeds, often surrounded by juicy fruits. Humans are very reliant on insect pollination for growing food.

Bumblebees are especially important as they are able to 'work' in cooler temperatures and are the only insects to carry out buzz pollination where they vibrate their flight muscles to release the pollen. This is essential for some of our most important crops including tomatoes, blueberries and kiwi fruits!



With a little bit of help from our friends (the bees)...

Fruit and vegetable plants can be grown in any size space and are a great way to encourage bees and other beneficial insects into your garden.



Try growing:

- Runner beans on a willow wigwam.
- Raspberry canes in a sunny corner.
- Strawberries in hanging baskets.
- Tomatoes, cucumbers and courgettes in a greenhouse or start off on a windowsill and plant out in early summer.
- Peas on willow climbing frames.
- Fruit trees. Please see activity sheet 'Fruit trees and bees' for more information on orchards and fruit trees.

(right) Runner beans are easy to grow, and produce a good harvest.

(below) A bumblebee with a very full pollen basket.



Photo credit: Clare Flynn



Did you know?

Bumblebees carry pollen in 'pollen baskets' – special areas on their back legs which are shiny and smooth but surrounded by bristly hairs.

Bumblebees comb the pollen from their bodies, add sticky nectar, then attach it in a lump to the pollen basket.

Have a look at bumblebees in the summer – are their pollen baskets full?



Photo credit: Clare Flynn



Practical ideas for harvests

A vegetable garden provides a rich source of food for both bumblebees and you!

Soft berry jam

You will need: any combination of berries including strawberries, raspberries or blackberries, preserving sugar (approx 400g to each 500g of fruit) and 1 lemon.

Fresh fruit can be frozen until you are ready.

1. Soak fruit in sugar for a few hours.
2. Boil in large pan with lemon juice for 10-15mins until setting point is reached. (Spoon a drop of jam onto a cold saucer to see if it 'crinkles').
3. Ladle into **sterilised jars** and label.



Photo credit: Clare Flynn

Traffic light chutney

A great way of using up green, red and amber tomatoes! You will need: 2kg tomatoes (red or still green), 500g each of onion, raisins, apples and brown sugar, 1tbsp salt, 1 litre of spiced pickling vinegar and cornflour (optional).

1. Finely chop tomatoes and onions. Mix with salt and **leave overnight**.
2. Peel, core and finely chop apple. Add to sugar and vinegar in a large pan with raisins. Simmer for about 10mins.
3. Drain liquid off the tomatoes and onions then add those to the pan too.
4. Simmer for at least an hour, until thick and pulpy, stirring occasionally and removing any loose tomato skins. If chutney is not thickening, 2-3 desert spoons of cornflower can be stirred in as required.
5. Decant into **sterilised jars** and label.



Photo credit: Clare Flynn

Hearty courgette soup

You will need: 3 or 4 courgettes (skin on), 2 onions, 2 cloves garlic, 1 small chilli (optional), 1 potato, 1/2 cup of red lentils. 750ml vegetable stock, 1tbsp olive oil.

1. Chop onions, garlic, chilli and potato and fry gently in oil for 5-10 minutes.
2. Add 500ml of the stock and lentils, boil, then simmer gently for 10min.
3. Add the courgettes and enough stock to just cover them. Simmer for another 15mins until all the vegetables and lentils are soft.
4. Blend to form a smooth soup. Add stock or water if too thick and season to taste with salt and pepper.



Why not try...

- Fresh fruit smoothies.
- Fresh tomato pizza toppings.
- Chopping and freezing runner beans so you have yummy, bee-pollinated veg with your Christmas dinner!
- Eating peas straight from the pod!



All activities should be carried out with standard **Health and Safety and Risk Assessment** procedures. Children should not carry out any of these activities without responsible adult supervision and some activities using tools may be unsuitable for younger children.

Produced thanks to generous support of:

