

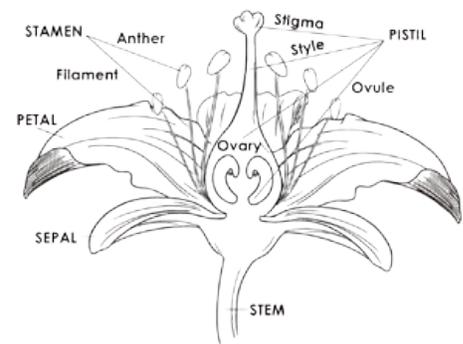
FLOWERS NEED POLLINATORS

On the Sweet Virginia farm, like everywhere else in the world, flowering plants rely on pollinators to help them reproduce. Some plants can catch pollen from the wind, most flowering plants need a bee, hummingbird, bat, or other pollinator to bring pollen to them from another plant of the same species. Many of our fruits and vegetables are flowering plants that require pollination to grow. About 1/3 of our food supply relies on pollination by honey bees. Foods like apples, cherries, cucumbers, carrots, and almonds all need honey bees. Let's take a look at how flowers are built and why they need pollinators.

Flowers are made up of specific male and female parts that allow them to reproduce. The male part of a flower is called the stamen and includes the anther and the filament. The anther is the part that produces pollen and the filament supports the anther. The female part of the flower is called the pistil and includes the stigma, the style, and the ovary and ovule. The stigma attracts sticky pollen, the style allows pollen to travel to the ovary, and the ovary holds the ovule (or egg).

In addition to these reproductive parts, the flower has other parts. The stem supports the whole flower, the petals attract pollinators with their bright colors, and the sepals are coverings that protect the flowers before they open.

Take a moment to color code the drawing. Color the male parts yellow and the female parts green.



HONEY BEES ARE POLLINATORS

The worker bees at Sweet Virginia spend most of their time collecting nectar and pollen from flowers. They need to bring both food sources back to the hive to make honey and feed the brood. An interesting and important thing happens when bees visit many flowers to collect nectar and pollen: they also move pollen from flower to flower. The transfer of pollen as honey bees are flying around to many flowers allows the flowering plants to reproduce.



A honey bee is a hairy creature. And, its hairs are electrostatic! When the bee lands on a flower and begins to drink nectar, a lot of pollen gets stuck to the bee. The bee needs pollen to take back to the hive, so she begins to pack pollen in her pollen baskets. She uses her legs to scrape the pollen off of her body and into the pollen baskets. But, she doesn't get all the pollen off her body.

When the honey bee visits the next flower, there is still some pollen stuck to her body. As she works to collect nectar and pollen from this second flower, some of the old pollen rubs off onto this new flower. Pollination occurs! And on, and on, and on, through all the flowers of the field.