



and why we need to care about them!



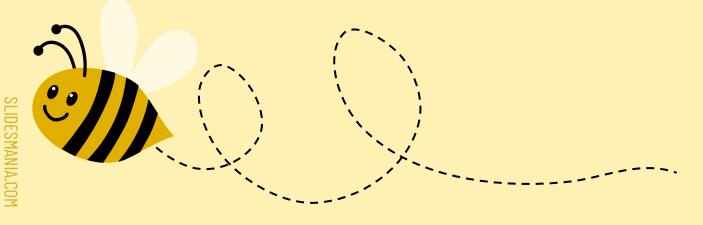




Bees

Bees are **insects** related to **wasps** and **ants**. They live all over the world except Antarctica.

The best-known kinds are honeybees and bumblebees. Honeybees also produce beeswax, which people use to make candles.









They have a three part body and six legs.
They also have 2 pairs of wings and five eyes. They also have mouth parts that act like a long tongue.

Female bees also have a stinger. Male bees cannot sting.





How many different bees are there?

- In Ireland, there are **98 different species** of bee. We have the familiar honeybee which is a managed pollinator, and then 97 wild bee species.
- Only one is a honey bee.
- There are about 20 Bumble Bee species. Honey bees and bumble bees are social bees and live as colonies.





What do bees eat?

- Adult bees forage for pollen and nectar, the sweet liquid produced by flowers.
- They feed the pollen to the young grubs in the hive or nest. Pollen has lots of protein.
- Adult bees use nectar to make honey in the hive. Honey is stored for winter.



Where do bees live?

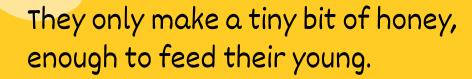
- We Honey bees in the wild make their nests in trees, sometimes using holes in trunks or branches
- People keep honey bees in bee hives which are usually made from wood.
- Bumble bees make small nests, often in the ground.
- Solitary bees live in lots of places, including in a hole in a wall or in the lawn.



Bumble Bees









They are round and furry and fly a lot more slowly than honey bees.



They rarely use their sting, and do not die when they do use it.











Honey Bees





Honey bees are very busy bees.

They live in colonies with lots of other honey bees.



Bees make and store honey to eat in autumn and winter.



They make so much honey that people can take some without harming the bee colony.



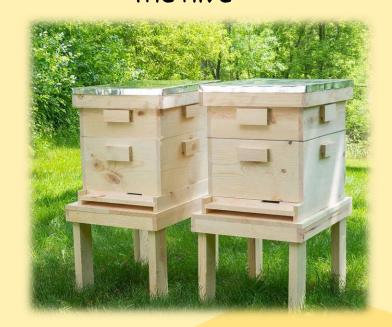






A honey bee hive

The hive



Inside the hive



Collecting honey from the hive



You must wear protective clothes!







What shape are honeycomb cells?



Inside the hive, the honey bees raise their young in cells.



Each egg is laid in its own cell.



The grub hatches and grows in the cell.



Worker bees feed the grubs with pollen.



What types of bee are in a hive?

There are 3 types of bee:



The Queen: only 1 of these





Workers: all females, who keep the hive tidy and fly out to find

pollen and nectar









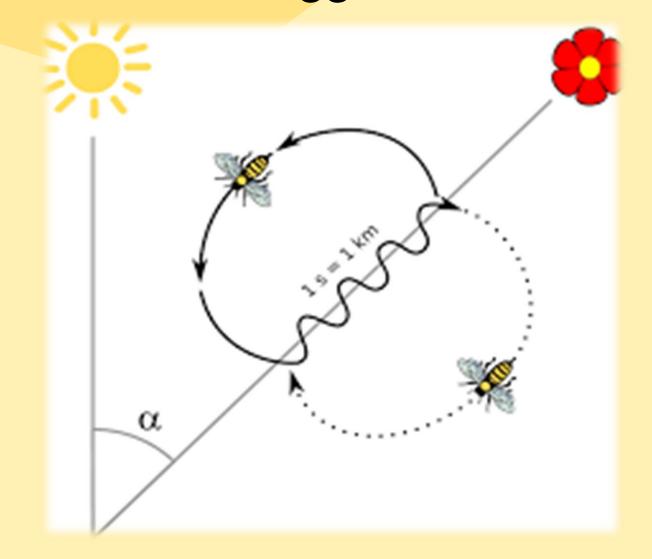
How do bees find food?

- When a worker bee is about 3 weeks old she can fly out of the nest to find flowers to collect nectar and pollen from.
- When she finds a good source of nectar she flies back to the hive and does a 'waggle dance'.
- This tells other worker bees where to fly to find the good source of food.





The Waggle Dance







Why are we worried about bees?

- We Bees are dying out. This is a problem for us.
- Besides feeding themselves when they collect pollen, bees do a very important job.
- They pollinate many, many of the plants we eat.





Pollination

Bees get all their food from flowers. This food consists of a sweet liquid called nectar and a dust like substance called **pollen**. Honeybees change nectar into honey, which they feed to their young. Bees also gather pollen to feed their young. As they go from flower to flower, they spill some pollen. In this way bees perform a very useful task. When pollen spreads from one flower to another of the same kind it allows the flowers to make seeds and therefore to make new flowers.

Pollination is necessary for the growth of many different fruits and vegetables.



How can we help look after bees?

- Be a friend to bees they are not bad for us. If a bee is bothering you, stand still and it will go away.
- Don't be scared of wild bees in the garden. Never harm a bees nest.
- Plant lots of flowers so bees can find lots of food.

