

# WHAT DO BEES SEE?

By Anja

Did you know bees have FIVE eyes!

Bees can't see red but they can see ultra violet.

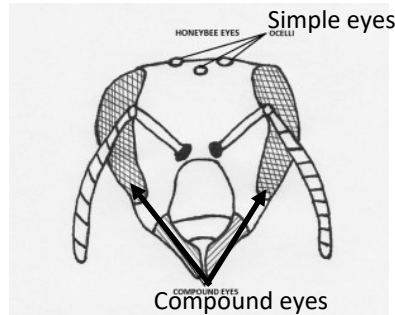


Diagram 1:  
Honey bee eyes

## Eyes:

Bees have five eyes, three simple eyes and two compound eyes (see diagram 1 above).

The simple eyes each have a single lens and are used for navigation and stability. The compound eyes are made up of thousands of lenses or facets. The facets mean the bee sees the world as a mosaic image.

Humans have two eyes, each with a single lens. This means we see a single image

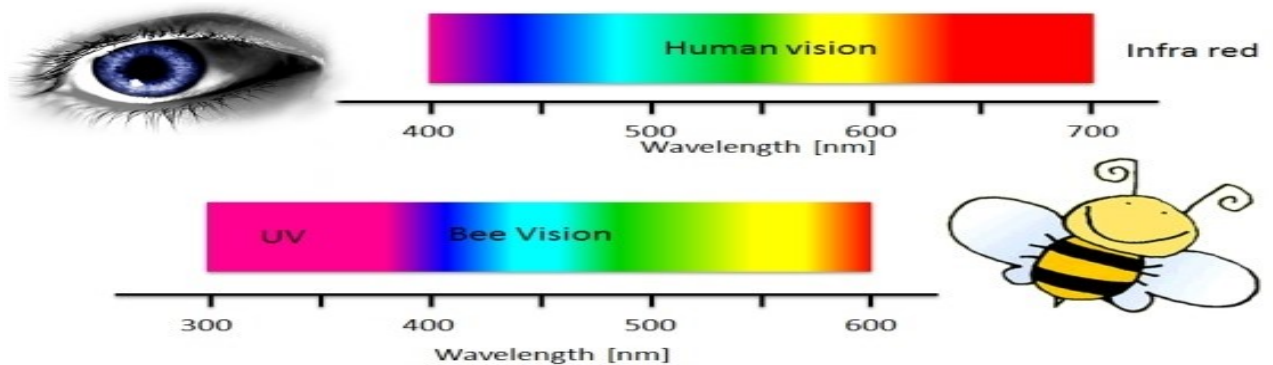


Diagram 2: Human vs Bee visual spectra

## Vision:

Both bees and humans see in three main colours of light. (see diagram 2 above)

- \* Humans: Red, Green and Blue
- \* Bees: Green, Blue and Ultra Violet (UV)

This means bees can't see red, instead they see grey. Plants have secret UV patterns that guide the bees towards the pollen and nectar (see diagram 3 next page).

Bees also see polarised light which helps them get home.



**Diagram 3:**

**Flower on the left shows human view**

**On the right the same flower as seen by a bee**



## Fun Facts

Beekeepers use red lights to monitor their bees as it doesn't disturb them.

Bees communicate by dancing!!

## Glossary:

<b>Lens</b>	A clear part of the eye that bring together the rays of light needed for sight.
<b>Navigation</b>	Direction and route of travel.
<b>Nectar</b>	Liquid produced by flowers and made into honey by bees.
<b>Polarised light</b>	Light waves of one direction.
<b>Pollen</b>	Fertilising powder produced by flowers
<b>Stability</b>	Keeping balanced.