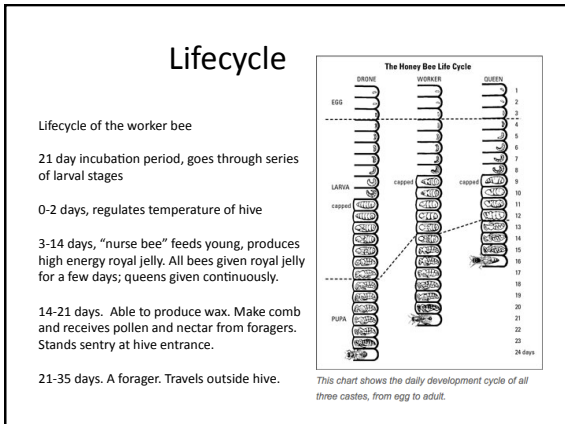
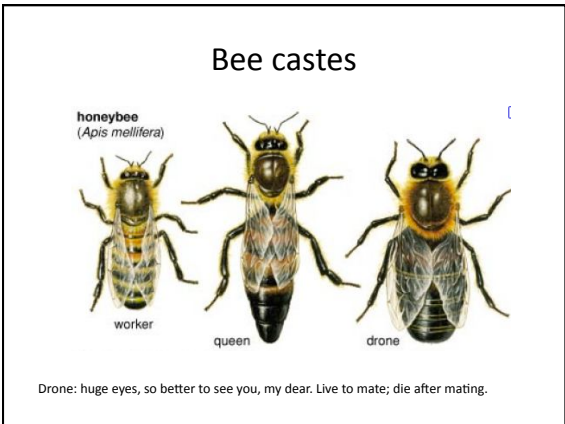
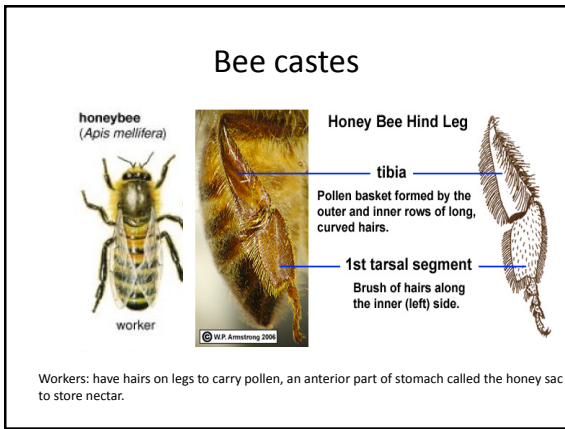
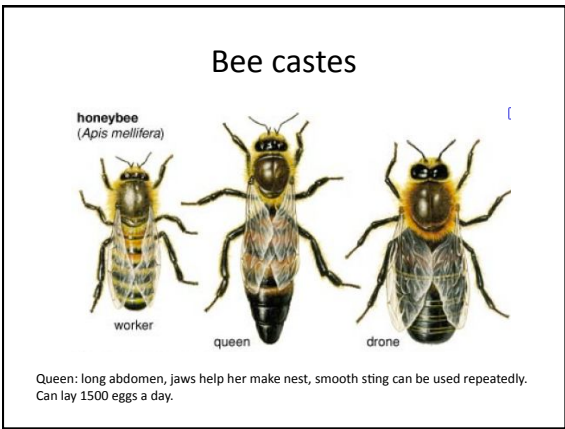
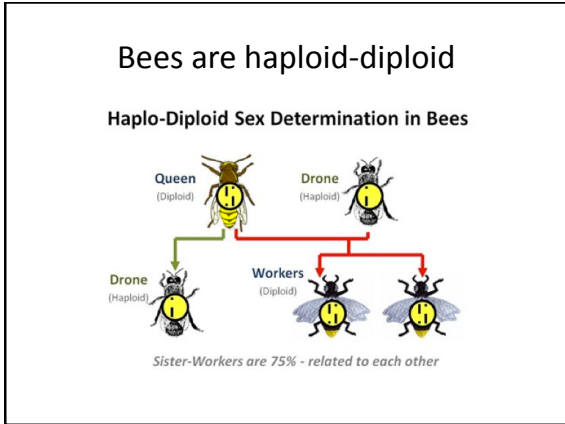


Bee dissection



Lifecycle

- Life of a queen
 - special queen cups
 - young queens fight to the death
 - nuptial flight. Mates with 12-14 drones. Stores sperm for lifetime (can be more than 3 yrs).
- Queen pheromone keeps other bees sterile, no new queen cups made
- when hive gets very big, new queens raised and bees swarm; % of hive leaves to form new hive.



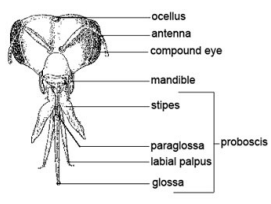
The honeybee swarm

<http://www.youtube.com/watch?v=FvjmyQAmP60>



Dissection of honeybee

- The head



Mandible chews, proboscis laps nectar

Dissection of honeybees

- The eyes
- Ocelli: 3 small organs that take information on light and dark.
- Compound eyes. Each eye has ~ 4,500 small ommatidia. Only 1/170 as spatially detailed as human vision.

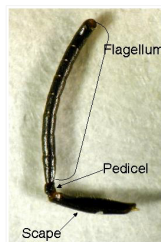
<http://andygiger.com/science/beye/beyehome.html>

Dissection of honeybees

- The eyes
- What colors can bees see?



Dissection of honeybees



Antennae capable of picking up thousands of different chemical stimuli, and the direction the stimulus is coming from.

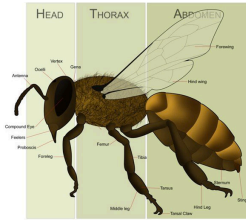
Can smell:
 -Smell of hive
 -Pheromones given out by queen, worker bees
 --Flower odors
 -- Bombs!

Can hear:
 Sounds of bees waggle dancing inside the Hive (in the dark)

Dissection of honeybees

- The thorax

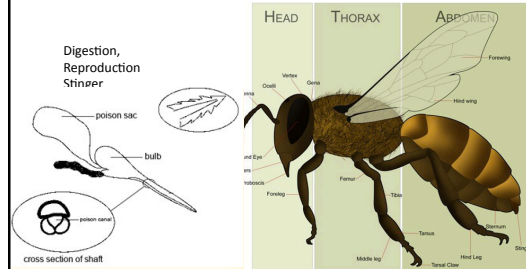
3 pair legs
2 pair wings



Dissection of honeybees

- The abdomen

Digestion,
Reproduction
Stinger



Dissection of honeybees

- Inside the abdomen

