

# Gold Coast Regional Beekeepers Inc.

## The Queen



Prepared by John Polley

# The Queen Bee



**The queen bee is the heart and soul of the honey bee colony. She is the reason for nearly everything the rest of the colony does. The queen is the only bee without which the rest of the colony cannot survive. A good quality queen means a strong and productive hive.**

## The Queen Cell



Two nurse bees watch over  
a queen larva in its cell and feed it Royal Jelly



Queen bee SWARM cells



Queen bee  
SUPERCEEDURE cells



Perfectly symmetrical royal cell hangs head down from a comb.

## The Queen Emerges



The Queen emerging from the Queen cell



Section of  
a queen-rearing cell removed to  
expose the Pupa during it's  
metaphoric transformation.

A Queen bee breeder checking a frame of brood



(c) Kathy Keatley Garvey





Frontal and side view of a queen alone on uncapped and capped brood comb. The cells and the pupa's they contain have been sealed by workers for the final transformation to occur.



At birth, the young queen starts looking for her sisters to eliminate them. If the queen meets one of them, a fight to death ensues.

# Queen bee mating in flight



**Mating occurs in flight over ten meters above ground. The young queen, born five to six days earlier, has only ventured out of the hive for her reconnaissance flight. When sexually mature, she leaves the hive on a fair windless day and mates with about a dozen males to fill her spermatheca. Mating results in death for the drones.**



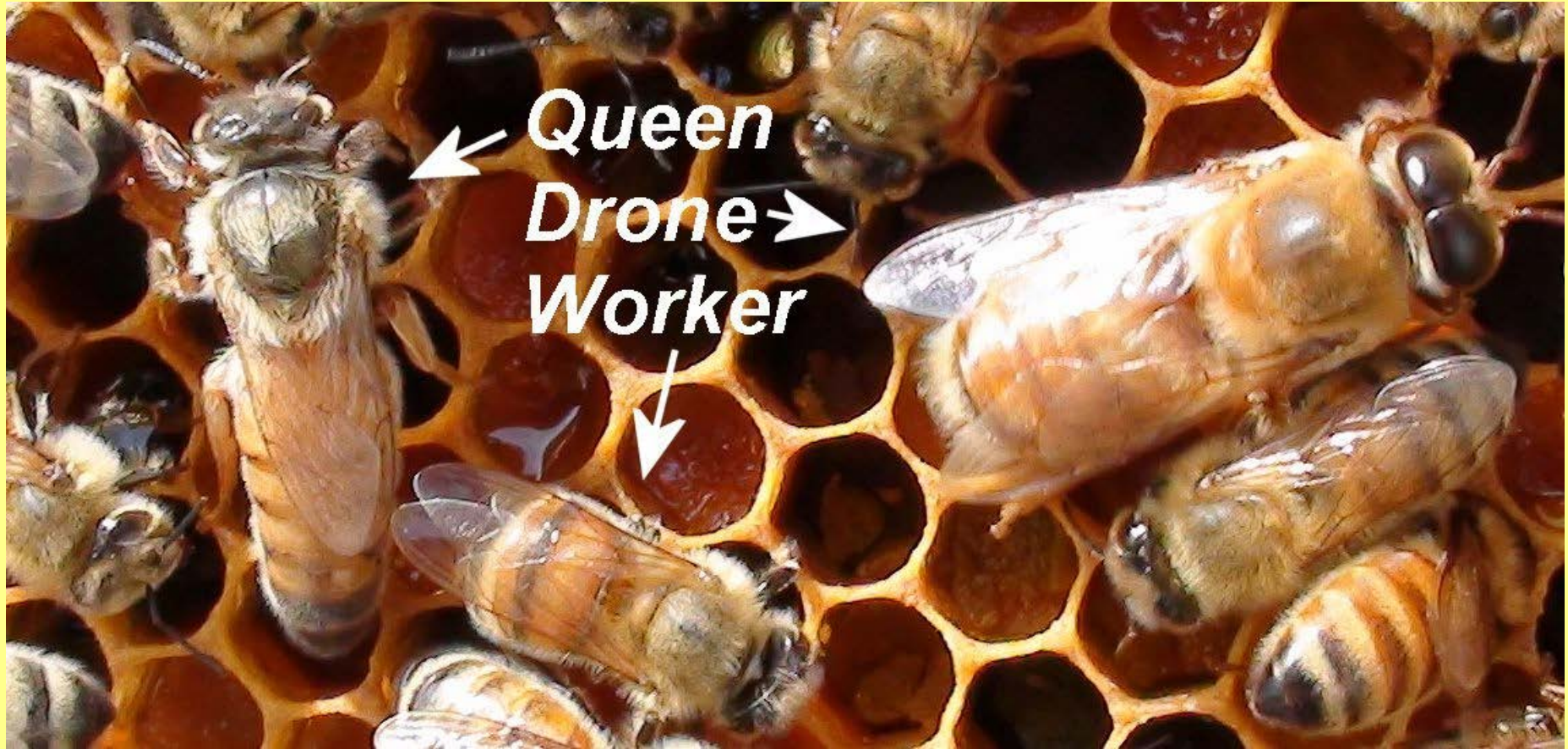
**A queen moves on a frame with the workers (her daughters) looking for honey. Her head has developed mandibles. Her thorax is larger than that of ordinary bees and the abdomen, which contains fully developed genital organs, is very developed. It can double in size during the laying period.**



**The queen, marked by the beekeeper, is laying eggs surrounded by her retinue. A few bees lick her body and a large number of bees touch her with their antennae's. Marking queens allows beekeepers to identify queens, to know their age and their laying cycles.**

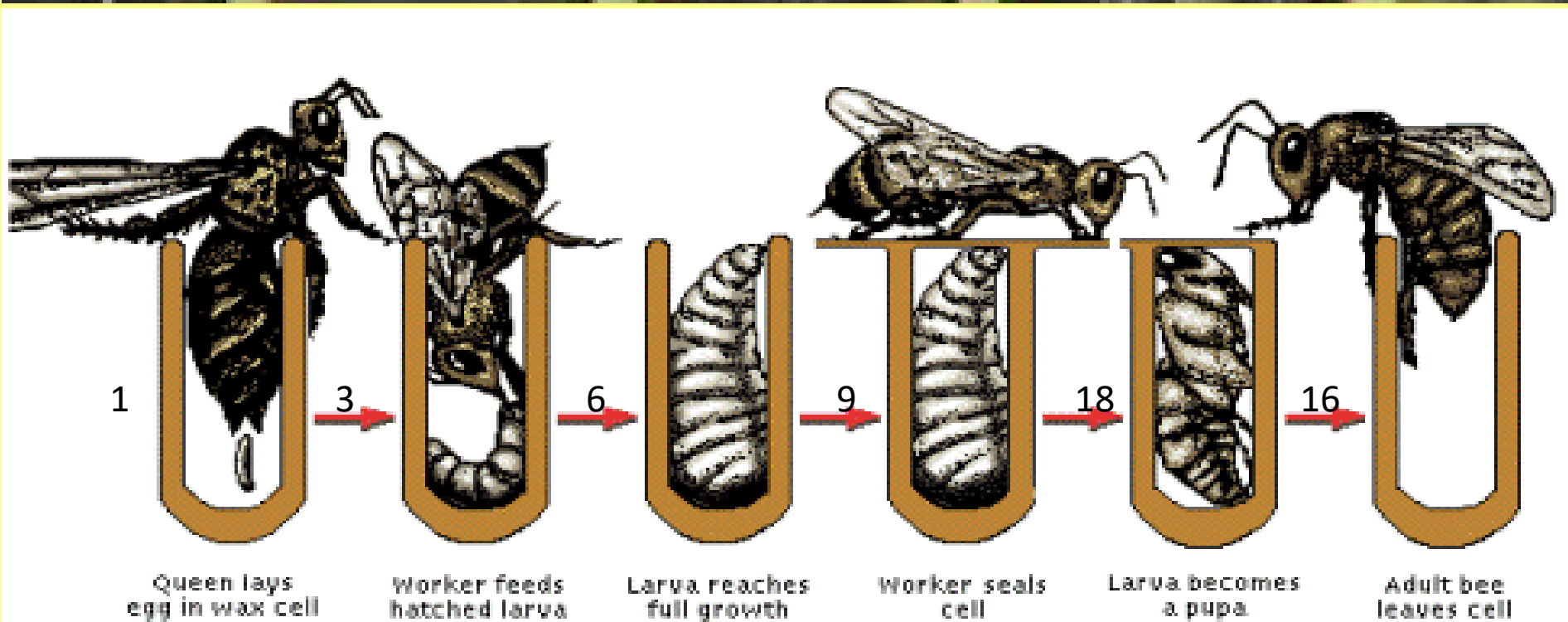
**The gentle queen bee has a stinger, but it is rare for a beekeeper to be stung by a queen bee. In general, queen bees use their stingers only to kill rival queens that may emerge or be introduced in the hive.**

The Queen laying an egg into a prepared cell





The pearly-white egg measures 1.5mm in length and 0.5mm in diameter and is stuck to the bottom of the cell by the queen, after she determines the size of the cell using her front legs.



1

Queen lays egg in wax cell

3

Worker feeds hatched larva

6

Larva reaches full growth

9

Worker seals cell

18

Larva becomes a pupa

16

Adult bee leaves cell



# Queen bee emerging from her cell



# Can you find the Queen



(c) Kathy Keatley Garvey