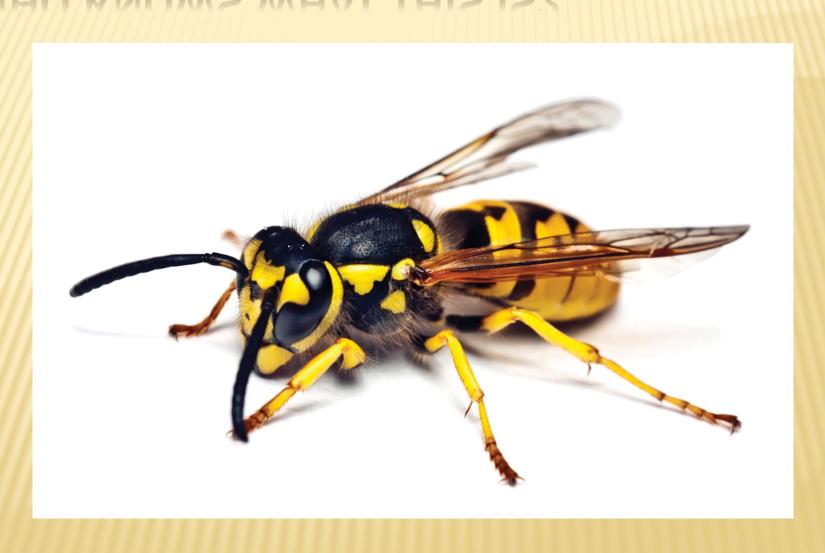


- Linda D. Tillman, Ph.D.
- Master Beekeeper

# MEET THE BEE

# WHO KNOWS WHAT THIS IS?

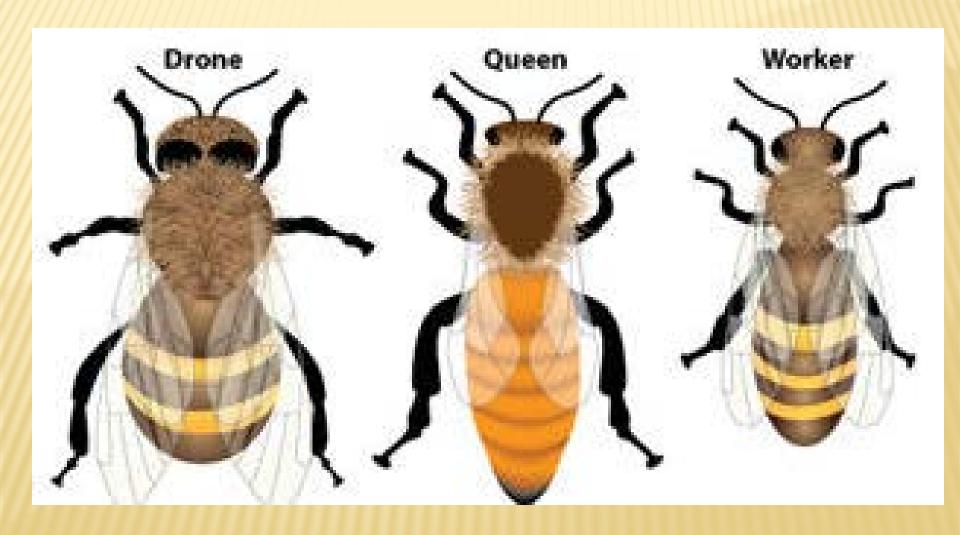


#### YELLOW JACKET HONEY BEE





# THREE TYPES OF BEES



# THE FAMILY IN THE BEE HIVE



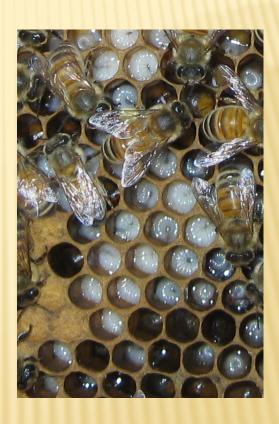
# REPRODUCTION TAKES PLACE WHEN THE QUEEN BEE LAYS EGGS



#### EGGS AND TINY C-SHAPED LARVAE

#### LARVAE IN ALL STAGES





### BEE: FROM EGG TO LARVAE TO WORKER



BEES REPRODUCE IN TWO WAYS - A SWARM IS THE SECOND WAY

#### THE NEW WAX IS VERY WHITE

#### **WORKERS FESTOON TO BUILD THE COMB**





### BEES BUILD WAX COMB



**BEES BUILDING WAX** 

### THE JOBS OF THE WORKER IN THE HIVE















#### **BROOD COMB**

#### **HONEY COMB**





# WAX BASIS FOR BROOD AND HONEY

### POLLINATION WITHOUT BEES





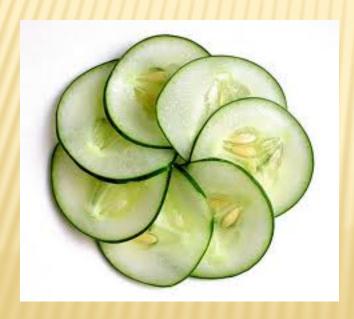




### BEES ARE NEEDED FOR POLLINATION







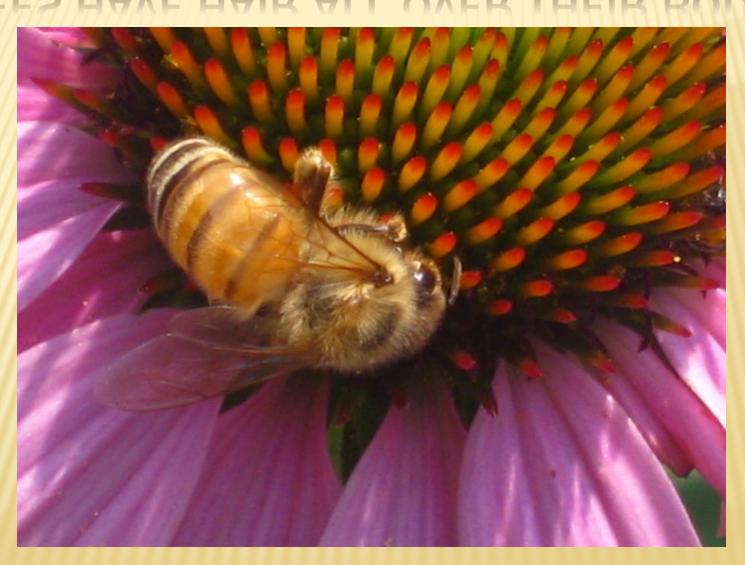


# WITHOUT BEES



**Photos from Whole Foods** 

### BEES HAVE HAIR ALL OVER THEIR BODIES





### BEES LOVE FLOWERS FOR NECTAR AND POLLEN

Blackberry on the shore of Black Rock Mountain Lake



#### **BUTTERFLY WEED**

All over the fields of Rabun County in the summer time



### JAPANESE KNOT WEED

Grows along the path at Black Rock Mountain Lake



### CLEOME

In my front yard in Atlanta, but you can find it in Rabun County as well



ON A MUTABILIS ROSE



### **ANISE HYSSOP**

In my garden in Rabun County

On the path around Black Rock Mountain



### **GOLDEN ROD**

# FATSIA JAPONICA







BEES ARE GREAT POLLINATORS FOR CUCUMBERS

#### THEY COLLECT POLLEN TO FEED LARVAE

### POLLEN IS IN POLLEN BASKET ON HER LEG





# WHEN THEY VISIT FLOWERS, THE BEES COLLECT POLLEN TO USE IN THE HIVE

### POLLEN STORED IN THE HIVE





### BEES STORE THE NECTAR

They evaporate the moisture over time and when it is only about 18.6% water, then they cap the honey

### WHEN A BEEKEEPER OPENS A HIVE





CAPPED HONEY, READY FOR HARVEST



YOU MIGHT SEE A BEARD ON THE HIVE



MOSTLY YOU'LL SEE BEES FLYING IN AND OUT

### HOW BEEKEEPING HAS ADDED TO MY LIFE

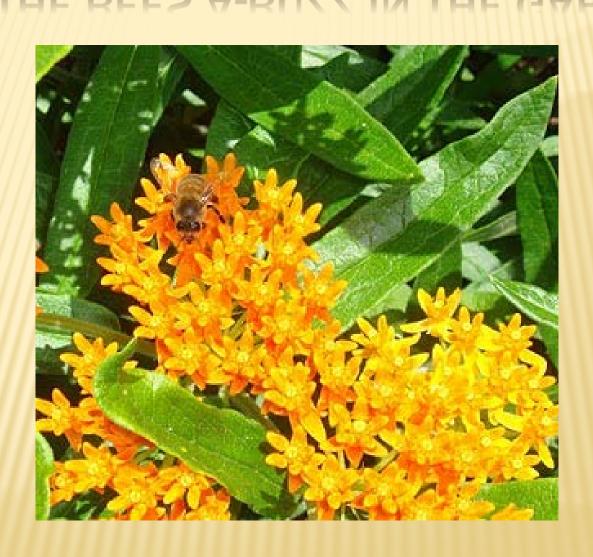
- Construction skills
- Biology knowledge
- New craft producing honey and wax products
- Aware of the weather
- Aware of what's blooming
- × A calmer approach
- Bee-ing more ecological



### GBA SPONSORED NEW LICENSE PLATE



# ENJOY THE BEES A-BUZZ IN THE GARDEN



Photos on this presentation are from my blog

### WWW.BEEKEEPERLINDA.COM

(WHEAT, BANANAS, OTHER CROPS AND BEE STING PHOTOS ARE FROM INTERNET CLIP ART)