



**Attend Field Day June 1,  
come bring a friend there is  
much to learn and it will take  
time, attend meetings ask  
questions, be informed.**



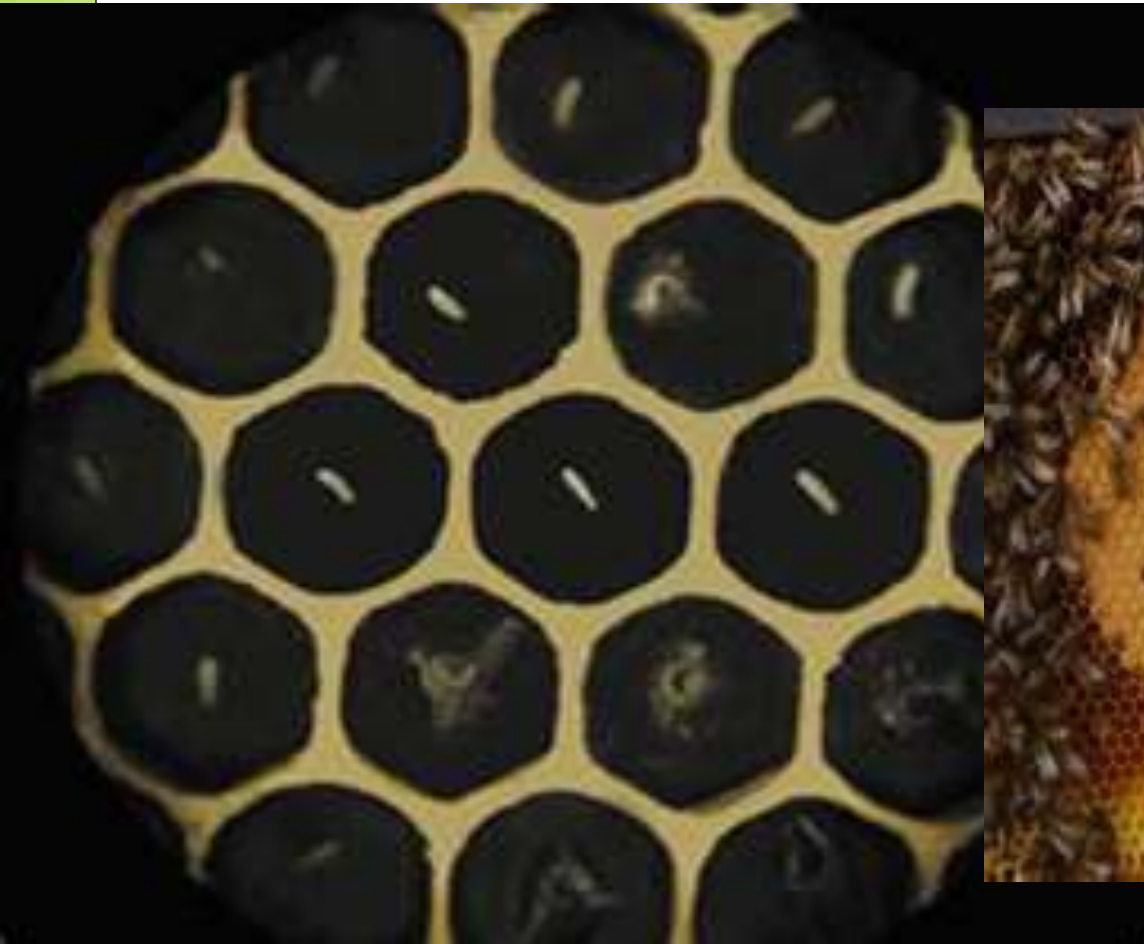
First Summer through Fall

# Lorain County Beekeepers Association

## Class 4

Gene Gargas

**All stages of brood at all times:**





**7 out of 10 rule time for a change:**

**When bees are on and building comb it may be time to add a box**

**Frame manipulation may also be in order**

**Look at all boxes every 7 to 10 days as well**

**Anything else is not beekeeping**



**Put them on if you need them but at some point they have to come off!**

# Swarming

- A collection of bees and a queen that has left one hive in search of a new home usually due to original colony being too crowded
- Occurs when colonies are not managed well

# Warning signs of potential swarming:

- Hive seems too crowded
- Brood area congested
- No place to store honey
- Honey in brood area
- Honey flow in progress
- Queen cups
- Weather can have a delayed effect on swarming and there may be several queens in the hive at once

# Indications your bees have already swarmed



Virto gran nich bees raising queen cells. R. Oliver





# Supercedure

- Natural occurrence of a colony replacing an old or ailing queen with a new queen.
- All indications can be observed.

# Supersedure cells

- Also called queen cells
- Peanut shaped appendages
- Hive does not believe their queen is performing up to par.
- All of the above occur right under the beekeepers nose and are precluded by other factors

# Two Types of Queen Cells

- **Supersedure cells**
- Located in upper 2/3 of frame

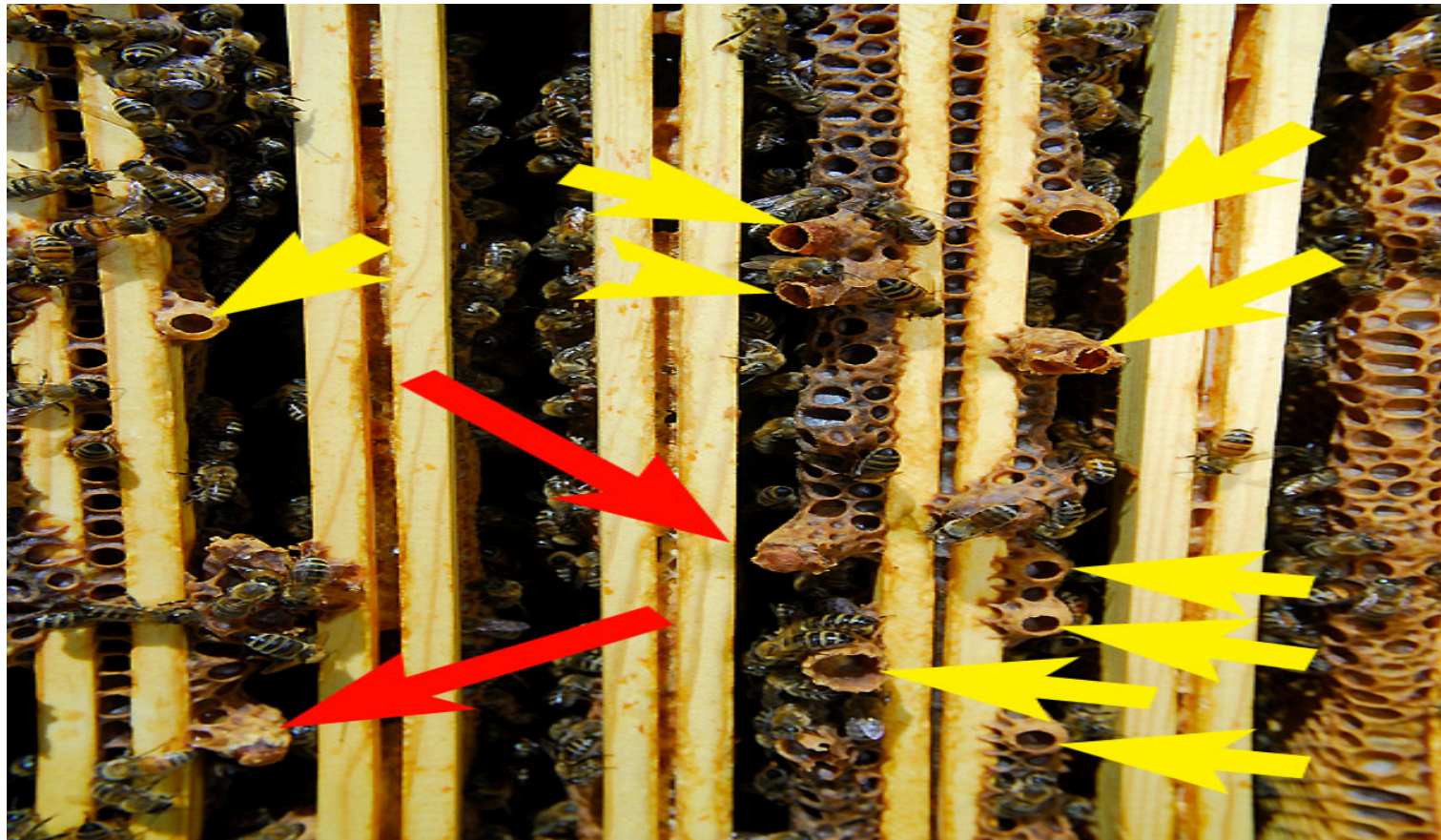


# Two Types of Queen Cells

- **Swarm cells**
- Located in lower 1/3 of frame
- Bees are creating a new queen in preparation of swarming



Swarm cells VS cups This colony has already swarmed



# Uncapped Queen Cells

- Original queen may still be in the house
- Search for queen



# Capped Queen Cells

- Swarm will soon depart or has already







# Why do you want to prevent swarming

- Expensive
- Loss of valuable honey production time
- Swarming late in season decreases winter survival rate due to new hive not having time to produce enough honey for them to survive over the winter

# How to keep the bees home!

- Check your hive regularly!
- Avoid congestion
- Provide adequate ventilation to help bees stay comfortable during hot weather
- Provide water source
- Shield hive from direct sunlight, place in dappled sunlight
- Remove queen swarm cells
- Replace your queen every season

# 7 / 10 Rule of Frames

- 7/10 in lower deep – add second deep
- 7/10 in second deep – add super
- 7/10 in super – add another super
- Etc.....

# Where did the queen go?

Dead, lost or gone

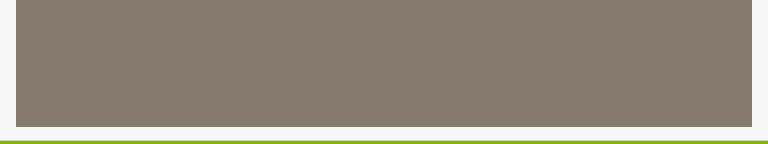
If a colony does not have a queen, it is doomed. Swarming leaves the beekeeper in a state of confusion.

2 choices to replace queen

1. let colony replace queen
2. order a replacement queen



Any break in brood production is  
never a good sign!



Recognizing the  
difference  
between normal and  
abnormal behavior

# Normal Bee Behavior

- Foraging bees go to and from hive with a purpose
- Shoot out of hive and go up and away
- Returning bees are weighted down with nectar and pollen and land solidly
- Returning bees may undershoot the landing and land on the ground.
- Young worker bees taking first flight
- Drones active in afternoons, normally frenzied flights
- In coming bees have an extended abdomen when carrying honey or water

# Abnormal Bee Behavior

- Approaching bee not weighted down with food, may go side to side to wait for opportune time to get into hive
- Fighting at the entrance with guard bees may be robber bees
- Bees leaving the hive are weighted down, may climb up front of hive to take off
- Characteristic dip in flight as they take off



# Laying worker phenomenon

- If there is no queen in hive, there are no queen pheromones to inhibit the development of worker bees reproductive organs
- Young workers ovaries will start to produce unfertile eggs since they have never been mated



Questions?