

State of the Hive

- Mesquite Honey flow
- Aggressive feral bees
- Swarming



Hive Management/ Intermediate Beekeeping

Southern Arizona Beekeepers Association

May 2024



Basic Hive Inspections

- Inspections should be done every 7-10 days during the spring and summer
- Hive inspections mean pulling out frames and inspecting them NOT just popping the lid open and glancing inside or filling a feeder. Ideally you will inspect all boxes in a hive not just the top box.
- Regular thorough inspections are necessary to detect problems (swarming, resource, disease, queen)
- This will be challenging as a beginning beekeeper but should get quicker and easier with experience and practice
- If you can't or aren't interested in doing regular thorough inspections you should reconsider becoming a beekeeper

Basic Hive Inspections

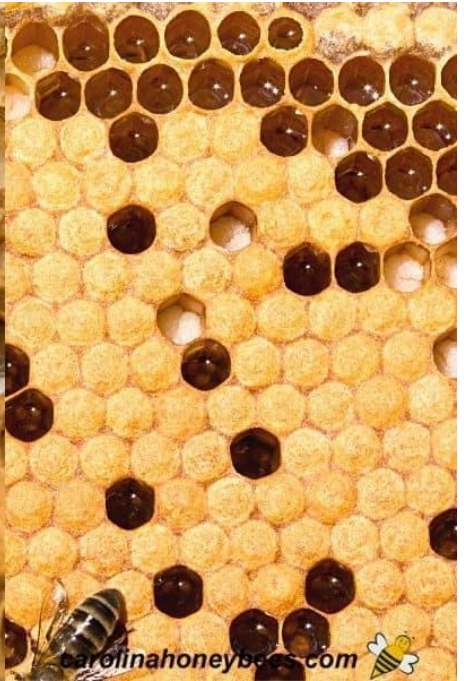
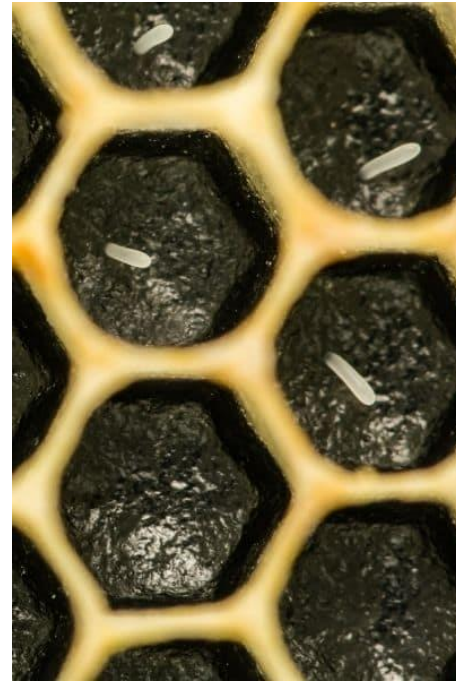
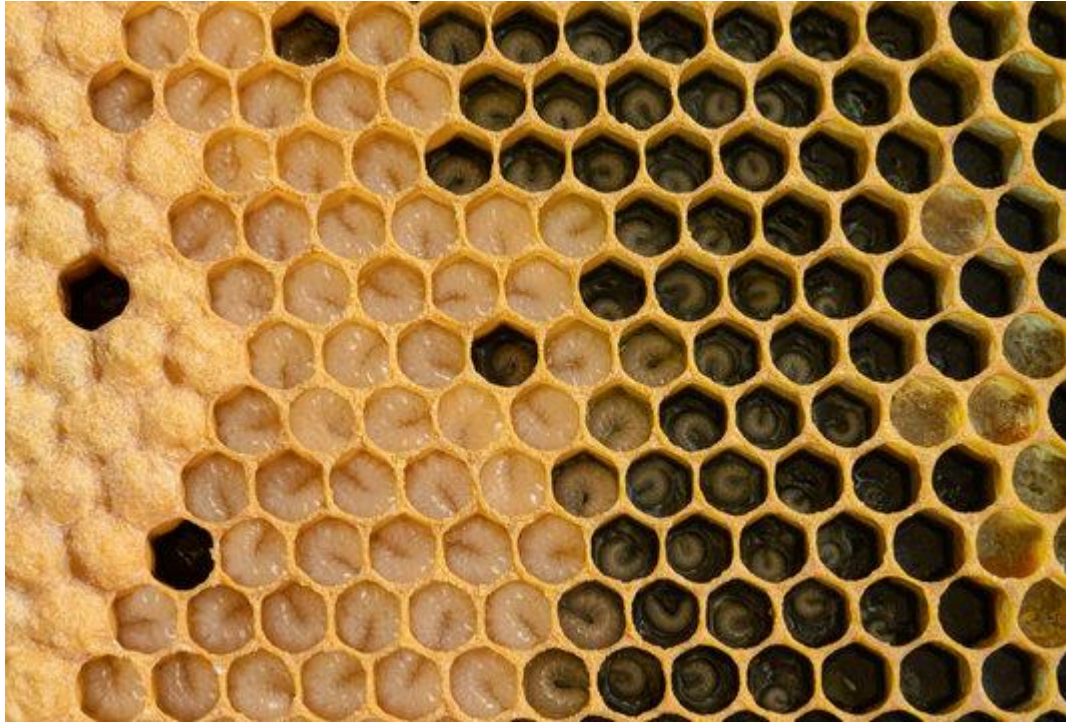
- During each inspection you should be looking for:
 - Eggs and Brood in all stages of development
 - The amount of resources (pollen and nectar cells) present, as well as the trend in resource availability (does it seem like there is more, less, or the same amount of resources relative to your last inspection)
 - The presence of queen cups/cells
 - The amount of used vs empty space in the hive; Are all frames drawn out with comb, covered in bees, empty or full of nectar and pollen?
 - The presence of a queen (ideally marked)
 - The overall pattern and distribution of brood within the hive
- During certain times of year these things can change quite drastically for one inspection to the next

Basic Hive Inspections

- It can be helpful to take notes during each inspection of your hives to allow you to notice trends from one inspection to the next and across different years. Noticing what time of year hives start producing queen cells, when resources become abundant or scarce can allow you to predict the needs of your hive as you gain experience and know when to be prepared to address certain types of colony needs.

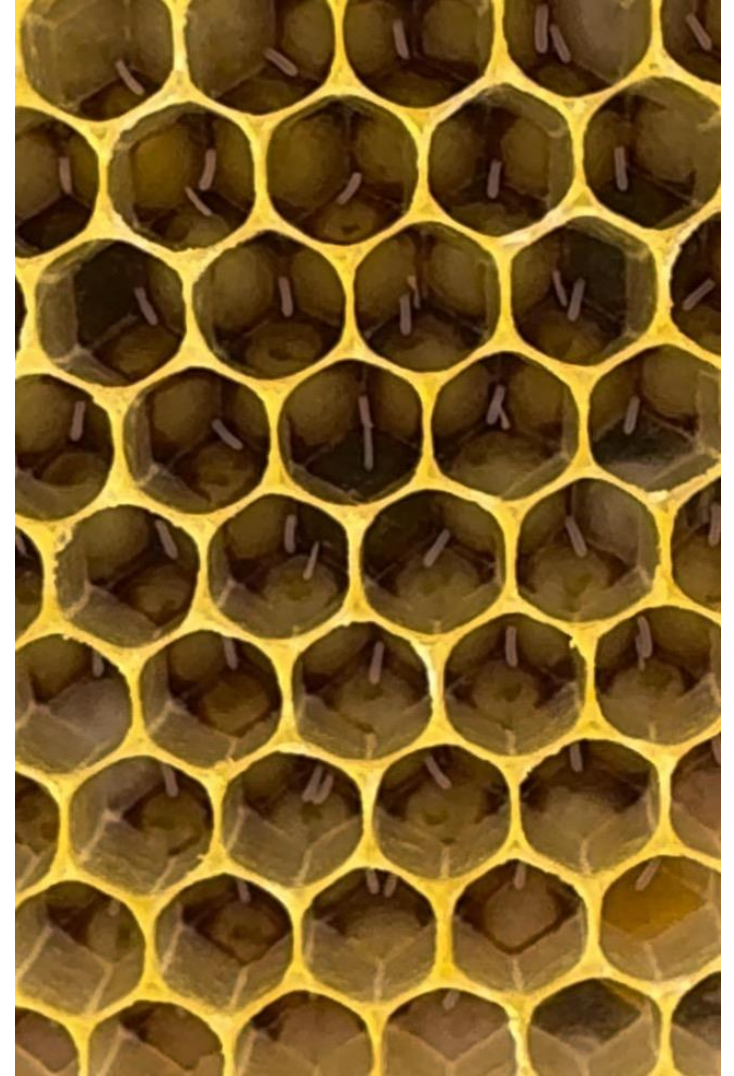
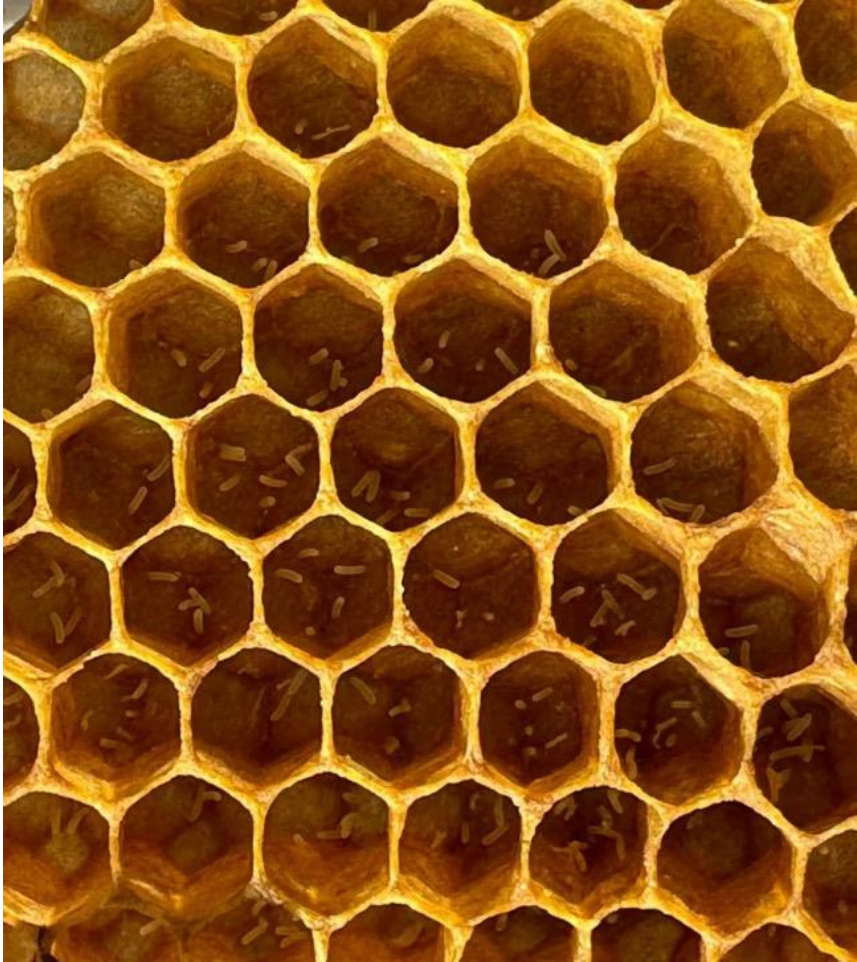
Basic Hive Inspections

- During each inspection you should be looking for:
 - Eggs and Brood in all stages of development



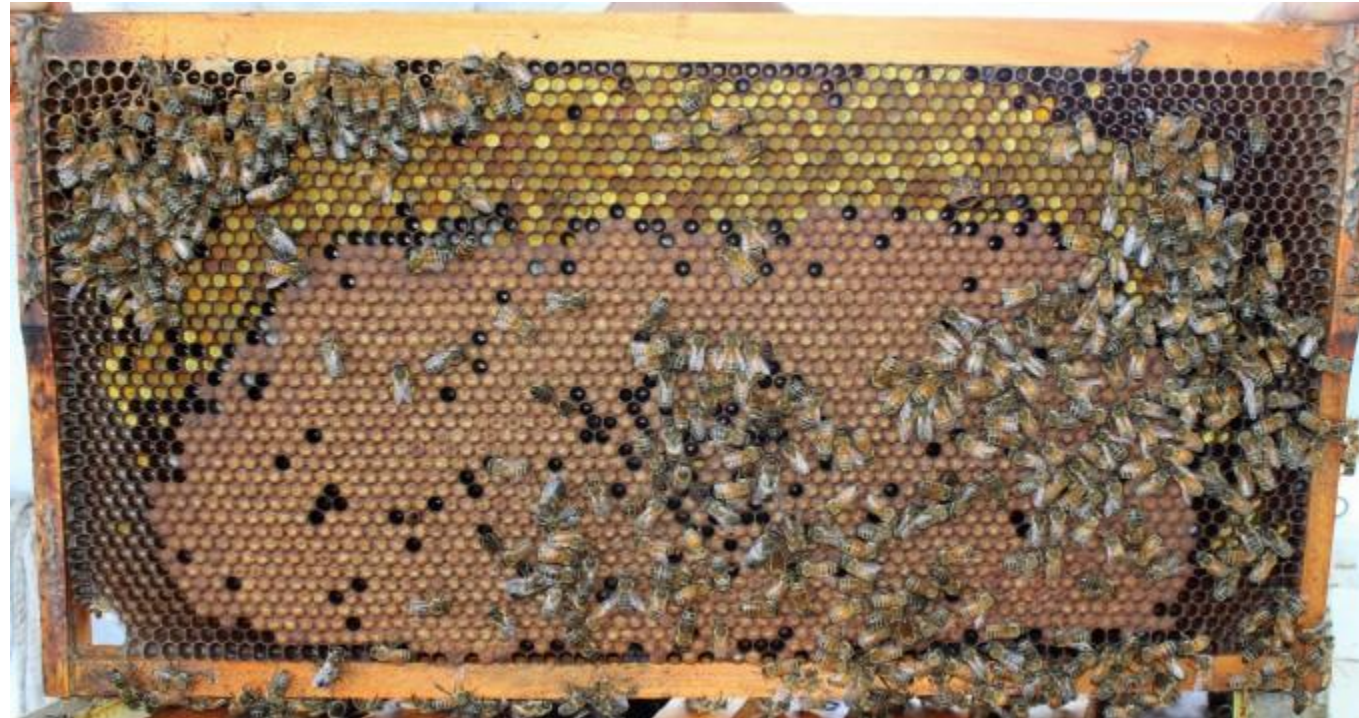
Basic Hive Inspections

- During each inspection you should be looking for:
 - Eggs and Brood in all stages of development



Basic Hive Inspections

- During each inspection you should be looking for:
 - The amount of resources (pollen and nectar cells) present, as well as the trend in resource availability (does it seem like there is more, less, or the same amount of resources relative to your last inspection)



Basic Hive Inspections

- During each inspection you should be looking for:
 - The amount of resources (pollen and nectar cells) present, as well as the trend in resource availability (does it seem like there is more, less, or the same amount of resources relative to your last inspection)



Managing Resource levels in Hives

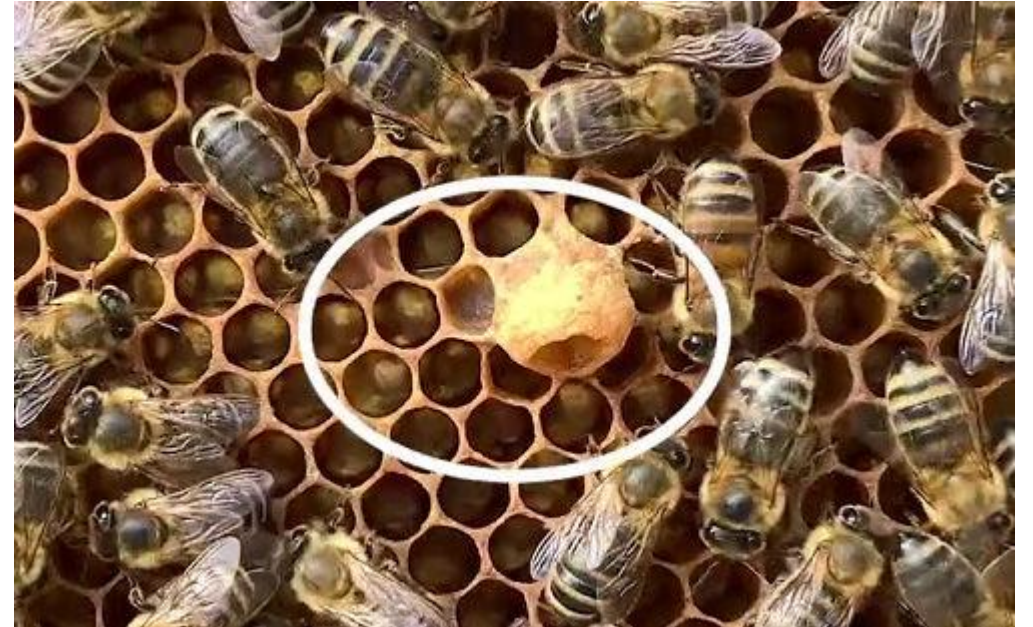
- If you notice the amount of resources in the hive **increasing** between each inspection you need to:
 - Prepare to give your colony more space to store their increasing amounts of resources and brood through frame manipulation and supering. Not providing space will lead to your colony running out of space and making preparations to swarm

Managing Resource levels in Hives

- If you notice the amount of resources in the hive **decreasing** between each inspection you need to:
 - Prepare to feed your colony sugar water and/or pollen substitute to avoid shutting decreasing brood production and starvation. If a colony has a large amount of stored resources you may not need to feed to avoid starvation but continue to monitor their resources with each inspection and be prepared to feed if resource stores dwindle

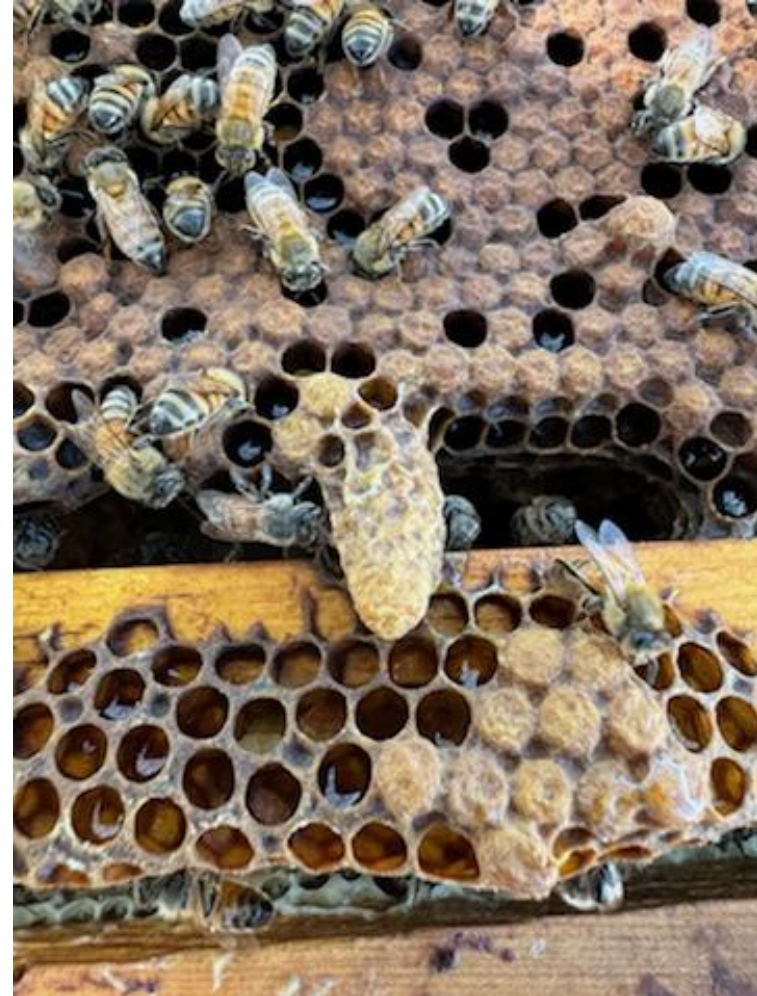
Basic Hive Inspections

- During each inspection you should be looking for:
 - The presence of queen cups/cells



Basic Hive Inspections

- During each inspection you should be looking for:
 - The presence of queen cups/cells



Managing Queen Cells and Swarming

- When you notice a hive making Queen cells containing an egg or larva you can;
 - Find and destroy all cells and provide the hive with additional space if needed. Will need to come back and inspect/ destroy cells again 5-7 days later. Providing space and destroying ALL cells being made can sometimes discourage a hive from swarming. Works best when cells are caught very early.
 - OR make a colony split

Managing Queen Cells and Swarming

- If you don't discover cells until they are capped or very well developed you need to:
 - Inspect to determine if you have eggs and a queen still present. If the queen is present you can try destroying all cells and providing space (or split). You can also clip or cage the queen to try and discourage swarming.
 - If you can't find the queen or eggs when capped queen cells are discovered then DO NOT destroy queen cells until you are able to acquire a replacement queen. Destroying all cells in a queenless hive and not providing a replacement queen will lead to laying workers

Basic Hive Inspections

- During each inspection you should be looking for:
 - The amount of used vs empty space in the hive; Are all frames drawn out with comb, covered in bees, empty or full of nectar and pollen?



Frame Manipulation and Supering to Create space as hives expand

- Manipulate frames or add supers/ an additional brood box to give the colony more space for brood and resource storage
- Manipulate frames by pulling empty frames (drawn or foundation from the edge of a box into the middle between brood frames to encourage them to be used
- If there are no empty frames in the box then add an additional box to provide empty frames for the colony to fill. When adding an additional box it is best to move 2-3 frames of brood or honey from the original box to the new box to encourage bees to start using it more quickly

Basic Hive Inspections

- During each inspection you should be looking for:
 - The presence of a queen (ideally marked)



Finding an unmarked queen (when you used to have a marked queen)

- It is possible that the workers cleaned the paint off of the queen. If you look closely you can sometimes still see a small amount of paint left on the queen's back. Remark the queen in this case.
- If you think that the unmarked queen is a new queen then you will want to arrange to get a new queen from a quality queen producer so that you can replace what is likely a queen with feral aggressive genetics (open mated)

Basic Hive Inspections

- During each inspection you should be looking for:
 - The overall pattern and distribution of brood within the hive



Basic Hive Inspections

- During each inspection you should be looking for:
 - The overall pattern and distribution of brood within the hive



Dealing with Bad Brood Patterns

- A bad brood pattern is an indication of either a poor quality queen or a disease/parasite problem
- If a hive with the same queen that previously produce strong healthy patterns starts producing bad patterns it is likely the result of disease/parasite problems
- If a new or very old queen is producing a bad pattern it is likely the result of poor queen quality
- Look for telltale signs of particular brood diseases or do a mite count to determine if treatment of the colony is needed. Act as soon as possible to address the problem as waiting will make things worse

Questions.....????

