Coweta Beekeeping Method - Summer Queens

Why

- Kill mites. Raising an emergency queen creates a broodless period. As the new queen's larvae grow the mites enter the first cells that will be capped to lay eggs. The capped cells trap the mites. All the mites die in any cell with four or more mites due to lack of nourishment.
- Vigorous egg laying into the fall prevents mites from overwhelming the colony. A queen mated **before** the summer solstice reduces eggs production after the summer solstice enabling mites to overwhelm the colony.
- A strong healthy worker population enhances winter survival. Healthy disease free workers' keep the cluster size large enough to survive cold weather in January and February.
- A young six month old queen will lay abundantly starting in January building a strong colony for a large honey harvest.
- All colonies should be requeened with summer queens for winter survival.

Skills needed

- Rate colonies for good attributes such as, lack of aggressiveness, lack of nervousness, honey production or other attributes. Picking the best colonies for queen production creates survivor colonies for your area.
- Assess the strength of the colony. A colony is strong enough to raise queens if there are six or more deep frames of brood.
- Find the queen. Required to make the colony queenless and raise emergency queens. Also required to requeen each colony with queen cells. If you cannot find the queen today, try again tomorrow or the next day.
- Identify less than 36 hour old worker larvae. Young larvae are used to raise strong emergency queens.
- Notch cells of less than 36 hour old larvae. This enables the colony to make a vertical queen cell out of a horizontal worker cell.

References

OTS Queen Rearing by Mel Disselkoen http://www.mdasplitter.com/ This web site contains many PDF files for additional reading.

Timing

Timing is important for quality summer queen rearing. Start no earlier than June 10 by making a split with the queen and notching, resulting in queens emerging and mating after the summer solstice. Summer queens should not be started after July. Queens raised from cells notched on July 31 will mate in mid-August. Queens started in August may be poorly mated as the drone population diminishes as fall approaches.

Genetics Selection

Decide which colonies have the best attributes. The following offers some guidance:

- Is the colony protective and aggressive, stinging during inspections?
- Does the colony swarm more often than other colonies?
- Is the colony nervous during inspections with workers running all over the frames?
- Is it a weak colony with no good attributes?
- Did the colony produce a good honey crop?
- Other attributes?

Selecting the best genetics for queen production enables a beekeeper to create survivor bees for a particular area. Initial selection may involve excluding a colony because it is too aggressive, weak or some other negative attribute. Selecting each year for good attributes will enhance genetics over time.

Determine if the hive is strong

A strong hive has 6 or more deep frames of worker brood. A strong hive can raise strong queens. Do not use a hive with less than 6 deep frames of brood to raise emergency queens because queen quality may suffer.

Find the Queen

Finding the queen can be difficult. She usually is on brood frames. Sometimes she is away from the brood frames or on the inside wall of the super. Be methodical and look at each frame. If you don't find her today, try again tomorrow.

https://youtu.be/hcc7ox4aboo

http://www.bushfarms.com/beesqueenspotting.htm

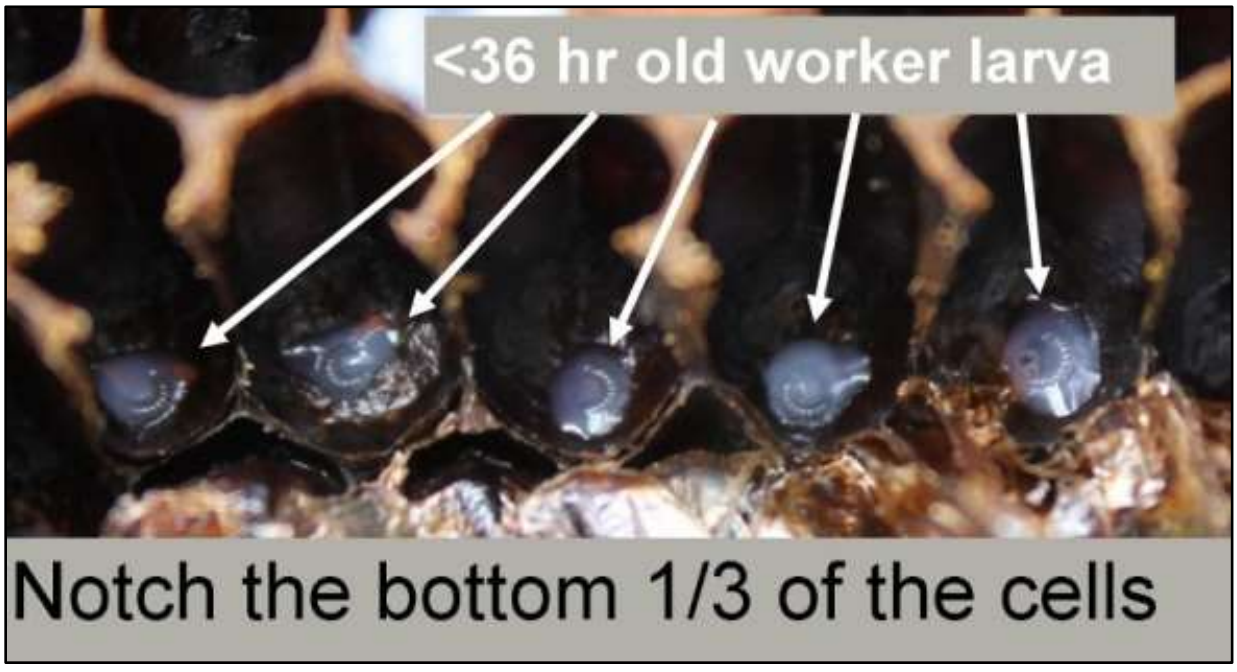
Make the colony queenless

Make a split using a nuc with two frames of brood and the queen. Shake one or two frames of nurse bees into the nuc. Move the split to another bee yard and reduce the entrance to a small opening. Feed the split. This split can be used as a new colony with the queen replaced later with a summer queen.

The now queenless strong colony will raise emergency queens.

Notch some worker cells

Check each of the four or more remaining deep frames of brood for young, less than 36 hour old, worker larvae. Notch about 12 cells of young larvae on each frame. Notching removes the bottom third of a cell all the way to the foundation enabling the colony to create a vertical queen cell. Don't touch the larvae while notching.



Wait seven days.

Introduce Summer Queens

Seven days after notching inspect the hive for queen cells. One frame with two queen cells will used to requeen each colony with a summer queen. Leave one frame in the hive to requeen with a summer queen.

Start with the colonies that are weak or aggressive and inspect the colony to find the queen. Dispatch (kill) the queen. Inspect the frame with the queen cells and remove all but the two largest cells. Remove a deep frame and install the frame with queen cells.

Depending on the honey stores the colony may need to be fed. If there are frames of foundation that need to be drawn out feed the colony.

Inspect in 30 days for a queen. Plan on feeding starting in August to encourage brood production and honey storage.

What Went Wrong

If you don't find any queen cells seven days after notching there probably is a queen still in the hive. But the queen was removed last week! Some hives have more than one queen. Everyone knows there is only one queen so they stop looking for a queen after finding one. A queenless colony wants to survive and will raise emergency queens if they become queenless.

Record Keeping

Keep records of each hive with a summer queen and document how many survive the winter. Mel Disselkoen had up to 90% winter survival in Michigan before neonicotinoid use became significant. Next spring please email me with the data.