

PEMI-BAKER BEEKEEPERS ASSOCIATION
SPEAKER: MIKE SMITH
FEBRUARY 14, 2017

In his introduction, Mike stated that he was a fifth year beekeeper, and a member of the PBBA. He took a class called Sustainable Beekeeping, which he highly recommends. In this class he learned how to do splits, raise queens, and make nuclear colonies (nucs). Mike said that the class is well worth the cost of the class.

Mike began his presentation by asking if anyone had a dead out in the winter with their hive. There was a show of hands. He stated that there are three reasons for your hives dying in the winter.

- 1) ventilation/moisture
- 2) mites/viruses
- 3) starvation

Our job as a beekeeper is to make sure our bees have food for the winter, and to feed them if they don't.

He asked by show of hands if anyone had their hive abscond. He said the major reasons for this are:

- 1) Queen issues
- 2) Bad nutrition

NUCLEAS COLONIES (NUCS)

Nuc's are 5 frame hive boxes in which you can keep a smaller colony to either start a new hive, or strengthen a failing one.

SPLITS

You can start making splits from May 15th through July 15th. You should NOT start a split after July 15th as the colony will not have time to build itself up to prepare for winter.

Nurse bees keep the brood warm. Nurse bees MUST go into the split to tend to the brood in the NUC. Nurse bees are key. Nurse bees will not fight each other - they will get along so you can mix nurse bees from different hives. The nurse bees job is to raise the brood. To set up our NUC we will need two frames with capped brood and one frame with one day old eggs. Then we add a frame of honey with pollen and one frame of foundation.

In order to get the nurse bees onto the frame with the brood for a 5 frame nuc we will set up a 10 frame hive body on top of the donor hive. We take two frames of capped brood, and shake off the bees (one at a time of course) - put these in our new 10 frame hive body. Then we find a frame with eggs, shake off the bees and put it in the new 10 frame hive body along with a frame of honey, and one foundation. Then put a queen excluder on top of the regular hive, place the new hive body on top of the queen excluder and close up the hive. Leave the hive for 8-10 hours.

Splits - Cont.

The nurse bees will have moved up as they will follow the brood pheromones, and the Queen will be below due to the excluder. Take the eggs, capped brood and nurse bees and put in the nuc that is set up on your hive stand. Close up the nuc, you are done.

If you are going to use a 10 frame hive body to make your split ... you would need to get 2 frames of honey, one of foundation, two frames of capped brood, two frames of eggs, another frame of capped brood, another frame of foundation, and one of honey - in that order in your hive box. Follow the above instructions with the queen excluder.

You have successfully made a split!

You can move this split 75 feet away - or six inches as long as you have the entrance slightly different from the entrance of the original hive. To move your hive - you use an outer cover under the new hive body with another outer cover on top of the new hive body. Add 1/1 sugar syrup in a hive top feeder (after the hive is moved). Lock the hive down tight for 8-10 days or until you don't see any robbing. Cover all the holes and the entrances with 1/8 inch hardware cloth (for ventilation). After the 8-10 days, the bees have to go for a cleansing flight. Between 10-12 days later, you can add capped brood from other hives to help support the new split.

QUEENS

- 1) You can raise your own from your own eggs.
 - 2) Use a swarm cell.
 - 3) Buy a fertile queen and install her.
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- 1) Raise your own queen - The egg is capped at 9 days, it takes 16 days to emerge. The queen then spends 3-4 days in the hive, on days 5-7 she takes her maiden voyages; she comes back gets her act together and starts laying on the 10-11th day. She will go out and mate with between 8-20 drones each time. Each maiden flight lasts about 20 minutes. In approximately 28 days you will have a eggs. In approximately 49 days from the day the queen egg was laid, her bees will hatch and emerge.
 - 2) Use a swarm cell (from the bottom of a frame - in the spring). Watch for swarm cells in your hive. If you find some take 3 swarm cells that are capped and put the frame they are on in a split. Do not bang the frame with the swarm cells as they are initially fragile. After the 9-11th day do not touch the swarm cells. Put the swarm cell in the middle of the hive body. The first queen out will kill the other two. DO NOT use superseder cells - which are on the top 1/3 of the frame - as this indicates that the hive is raising a new queen.

Queens - cont.

3) If you buy a fertile queen - you can install her in your split. If you use a cage made of 1/8 hardware cloth, push it into an area that has built out foundation. She will start laying in 3-4 days. She will be taken care of and accepted by the new bees, since she is a laying queen the hive will accept her more quickly too. Or you can use standard methods to install the queen using the cage she was delivered in.

The reason we don't try to raise queens after July 15th - it takes 11-14 days after a queen emerges till she starts to lay eggs. Those eggs take 21 days to hatch - now we are in late August. August is when the bees start to prepare for their winter. It doesn't give the bees enough time to raise a sufficient number of bees to keep the cluster warm for the winter.

THE KEY TO SPLITS AND RAISING QUEENS:

Start in September - feeding the bees 2/1 syrup (with medication for Nosema x 2) right through until October 15th.

Treat your bees for mites

Wrap your hives, and give them feed for the winter

Go into in February - Valentines Day - make sure they have enough stores to get them through the rest of the winter. (February to April is when we lose our bees)

Feed your bees from 4/15 but not before - 1/1 syrup with fumigillan B. They need to be able to take cleansing flights.

Reverse your hive bodies the 1st week of May - Move the box with the bees to the bottom of the stack, put other "empty" boxes above the bees.

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To stop laying workers - add capped brood to the hive. If necessary, no later than 9-10 days after the last capped brood hatches out in the hive.  
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Double Screen Board - There are 3 entrances on a double screen board. If you have a split that is weak, you can use a double screen board placed on top of a strong hive, utilizing entrances on opposite ends. The heat from the hive below helps keep the split above warm.

Overland Wintering Kit - If you have two Nucs that are weak, this will help them get through the winter. The heat from the hive below will help them get through the winter. You will have to feel them in late January - early February.

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"A Walk Away" Split - Take a strong hive, split two boxes - you can move them 6" apart if you wish - just have the openings face in opposite directions. The original hive's entrance should

not change. Put honey, capped brood, eggs and nectar in the new hive and walk away. One hive will have the original queen and the other will raise a new queen. This must be done early in the season.

The rejection rate of queens for package bees is 50%. However if you use a push in cage on built in foundation, the rejection rate is cut to 15%

A great way to check for chemicals or illnesses - smell your frames. You will be able to tell if something is amiss.

Mike's email - for questions is - thepurplefinch@hotmail.com