

Licking River Beekeepers Association

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Topic: Fall Inspections

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I like to perform two hive inspections in the fall. One is around the 1st of September and the other around mid to late October.

During the September 1st inspection this is some of the things I am looking for.

- Determining overall health and strength of hive. I want the hive boiling over with bees 30-40 sec after I remove the inner cover. I would like to have around 40,000-45,000 bees headed into the fall. I will usually check every frame, this is time consuming but necessary.
- Make sure you have a laying queen. If hive is queenless, no eggs, larva or brood you still have plenty of time to order a queen and get that hive back on track.
- I want to see about 7-10 frames of mixed brood (eggs, larva and capped brood) in a double deep box. Brood nest size can vary with Italian, Russian and Carniolan breeds especially if there was a dearth in August.
- Sometimes you will have a top box full of brood and honey and the bottom box is completely empty. I will reverse this hive every time. Bees don't like to fill an empty bottom box in the fall; therefore it may enter the winter that way if you don't fix it. With an empty box on top the queen will come up and lay and the bees have a place to store nectar and pollen they will get from Goldenrod and Aster this fall.
- If I have a hive that has the brood split say 5 frames in top and 5 in the bottom, I will move enough frames brood down to get 8 in the bottom and a frame of honey on both sides. I then will put the remaining brood centered in top box surrounded by empty combs and pollen and honey on outside if there is any.
- Be prepared to feed if necessary!!! I think one of the biggest mistakes beekeepers can make is not recognizing they need to feed sometimes in August or early September. If you find a hive very low or out of food don't hesitate to provide some 1:1 syrup and some protein patties. Remember Italian queens won't stop laying in a dearth, Russian and Carniolan queens will slow down or stop laying. At this time of year I want to see 3-4 frames of honey and pollen in a hive. You just want to give them a boost until a steady flow from Goldenrod and Asters begin. Remember if bees don't have pollen they won't raise healthy brood. If I don't see one or two frames pollen I will feed them some protein patties.
- If you find a really weak hive, be prepared to combine that hive with a strong hive in a few weeks if you're feeding and natural food sources doesn't get them back on track. That hive could have been a victim of robber bees; I keep all hives entrances to 1-3 inches max to help with robber situations. You can also use robber screens which are very effective.
- You can also equalize a weak hive by adding frames of brood from very strong hives. Usually 1-2 frames brood is enough. You can only add the frames of brood or you can add the frame of brood with the

nurse bees. **When I do this I make sure I find the queen in the strong hive first.** Remember that a frame of brood that is 80% capped will have about 5600 bees ready in hatch in the next several days. A frame of 80% capped brood and covered with bees will have an additional 3000 bees. That can really boost a hive quickly.

- If you treat for mites, September 1st is a good time to get started. Most treatments take about four weeks to complete and sometimes queens will slow down egg laying or almost completely stop. This is one reason you want 7-10 frames of brood now because that brood will be hatching in the next few weeks and represents about 25,000-35,000 plus bees. That will maintain hive strength through treatment period. If you have a good laying queen she will be able to create a lot of brood in October and November.

The second fall inspection I do is much quicker and shorter. I usually do this the third to fourth week of October and I am looking at the following.

- Mite treatments should be completed
- To determine amount of food hive has for fall and winter
 - Determines how much if any you need to feed in fall
 - If there was a good goldenrod and aster boom through September and October the bees should have adequate stores but don't take that for granted.
 - Goldenrod yellow pollen, Asters white pollen
 - By the end of November you will need 50# honey or syrup and pollen for winter months
 - Italians need the most food reserves and Russians the least
 - Frame food weights
 - Deep frame = 8-9# food
 - Medium frame = 3-4# food
- Make sure you have a queen and she is still laying
 - Mite treatments could have affected queen laying
 - You want to see a good brood pattern, 3-4 frames brood
 - By November – December the queen will really slow down laying, Russians almost stop laying completely
 - You can keep her laying some by providing 1:1 syrup but that is a gamble
 - More bees equal the need for more food
 - Must have pollen for queen to continue to lay
- Looking for honey bound hive
 - Sometimes bees will backfill the broodnest and then the queen has no place to lay.
- How many bees do you have in the hive?
 - Fully covered brood frame is about 1500 bees per side
 - Approximately 2800 capped cells per side if 80% capped
 - A deep frame has 7000 cells both sides
 - Need 20,000-30,000 bees for winter
 - If a double hive isn't real strong, cut down to a single box.
 - If bees can't use and can't protect the space, condense them to one box
- Install Mouse Guards

