Lake Cumberland Beekeepers Association

Lake Cumberland Beekeeper

June 2018 Newsletter

LCBA meeting Monday, June 18 2018

Honey, Honey

Now that the main nectar flow is over, beekeepers are harvesting honey across the region. LCBA Vice President Mike Wooton will be talking about harvesting and extracting honey.

There is more to harvesting honey than simply 'robbing the bees'. How do you know when honey is ripe for harvesting? How much honey can you take from the hive, and how much should you leave? And then there is the sticky business of extracting honey from the comb.

Doors to the meeting open at 6pm for general discussion, followed by a brief business meeting at 6.30pm. Thereafter Mike will talk about harvesting and extracting honey. Join us for an interesting and enjoyable evening! Refreshments will be served after the meeting.

In this 2016 photo, LCBA members Ray Tucker (l) and Doug Brock examine a beautiful frame of honey ready for uncapping and extracting.

Mike's Ramblings—A note from Mike Wooton, LCBA Vice President

Bees Are Making Honey - June 2018

June is here and our bees are doing their nectar and pollen collecting. As is natural for my apiary, some colonies are doing better than others. I have had a good spring so far. Five of my hives are filling the supers at a good pace. Three are flourishing with one needing three supers. My other hives are so-so but I have hope for them. I have collected a couple swarms this year and have made two splits. One of the swarms came to my bee shed while I was away; "someone left the door open", noticed several dead bees in the shed and moved the hive outside. The queen survived and I now have a thriving brood chamber.

Our nectar flow will soon be coming to an end for the most part and honey extracting can start. Be sure to watch for robbing when the flow wanes. June is a good time to requeen if you have weak hives. I plan to feed in July and do brood breaks and make some new queens.

Thanks to Sarah Preston who gave us some knowledgeable information on the treatment of mites at our May meeting. The June meeting will be a time to get together and share experiences that we have had this year with our hives. Every year is an exciting and informative experience. We will be giving a demonstration of honey extracting for the new members and answering any questions.

Mike Wooton
Vice President
Lake Cumberland Beekeepers Association
Mikewooton@hotmail.com 606-492-5228

Check out the LAKE CUMBERLAND BEEKEEPERS web site for information on our club and for additional information about bees.
BEE KIND TO OUR BEES!!!!

Editor: Hilary Forsyth
LCBA email: lakecumberland.beekeepers@gmail.com
LCBA website: *www.lakecumberlandbeekeepers.com*

LCBA President: Ginger Renaker
Phone: 606-416-0041
LCBA Vice-President: Michael Wooton
Cell phone: 606-492-5228
Email: mikewooton@hotmail.com

Varroa mite control : A Report on Sarah Preston's presentation

Sarah Preston, University of KY Graduate Student in the College of Agriculture, was the guest presenter at the May 2018 LCBA meeting.

Varroa mites are the biggest cause of hive losses, and Sarah has been studying the mite and researching control methods. Sarah emphasized the importance of varroa mite controls in beekeeping. She told how the varroa mite is the number 1 killer of honeybees by weakening the worker bees' immune systems, shortening the adult life span, spreading 23 viruses throughout the hive, and modifying the regular behavior of the bees.

Using visuals she showed how the female mite reproduces by entering a brood cell just before it is capped. The mite lays eggs in the brood cell which hatch and feed on the bee larva developing in the cell. When the adult bee chews its way out of the cell, 4 new varroa mites leave with it looking for brood cells to enter just before those cells are capped. The mite population develops exponentially reaching it's peak in late summer. It is important to bring down the mite numbers before they can affect the winter bees which are laid in late September. Bee population peaks in mid-August while mite population peaks in September.

Sarah recommended checking hive mite levels 4 times a year beginning in spring, June, August and early fall. Her preferred method of checking mite counts is to use an alcohol or powdered sugar wash. Using a ½ cup of bees (about 300) in a jar with a screened top, pour in alcohol to wash the mites off the bees and strain the alcohol and mites into a bowl for counting. Count the mites you find there and follow this guide: 3-5 mites - treatment needed ---more than 5 treat **immediately**. Remember some treatments are not to be used when honey supers are on the hive, while other treatments are OK when the honey supers are in place. If drowning bees is not your thing then pour powdered sugar into the jar with 300 bees and shake around straining the sugar and mites onto a plate and using water to melt the sugar so you can see and count the mites. Bees can go back into the hive.

When asked about the 24 hour sticky board mite counts used by many beekeepers who treat when the threshold of 25-30 mites is reached, Sarah replied that this method is not as accurate as the wash method. Either way one should remember that mite treatments should be alternated from time to time as the varroa mites can build up a resistance to a treatment used repeatedly making it ineffective. A mite count should always be done following a treatment to judge the treatment effectiveness in reducing mite count.

Sarah spoke about Integrated Pest Management ('IPM') techniques such as using screened bottom boards and mite resistant queens (VHS or Purdue mite biter) in the hive. Breaking the brood cycle with splits or requeening would bring down mite numbers as well as using a drone brood comb frame. It is important to remove that drone frame when it is capped and contains the mites. Freeze the frame to kill the drone brood full of mites and return it to the hive repeating the process every 14 days. The bees will clean the comb and the queen will lay drone eggs there. Remember that drone brood is the favorite breeding site for the varroa mite due to the larger cell size and longer developmental time for drones (24 days).

- Pat Rizenbergs

Beekeepers as Mentors

There is nothing beekeepers like more than to talk about their bees! Beekeeping can be a difficult and frustrating business, but also an intensely satisfying and rewarding one. Being able to discuss our bees' progress, and listening in on the hits and misses of our fellow beekeepers, helps us all to re-evaluate our own beekeeping expertise.

One of the hardest things to remember about any shared experience is how little we knew when we first started on any venture. Who among the more experienced beekeepers can remember what it felt like when our first bees arrived? It is sharing this accumulation of knowledge that could make a new beekeeper's experience that much more valuable; and helping share their knowledge is exactly what mentors do.

In May this year, several novice beekeepers in our group were keen to have experienced beekeepers help them with their newly arrived packages of bees, and LCBA circulated their pleas for assistance to all members.

LCBA member Pat Rizenbergs has been the main contact point for new beekeepers looking for mentors, and she has done an excellent job of matching mentors to mentees. Are you willing to mentor and share your knowledge? Please talk to Pat and have her add your name to the list of LCBA mentors. Everyone has knowledge to share: it is said that knowledge is the sum of our mistakes, and we've all made plenty of those!

- Hilary Forsyth

Casey County Bees : Beehive splits

It's now 10 weeks since we made our first beehive split using the double screen board method. This method of splitting a hive of bees entails placing the queen plus one frame of brood, a frame of stores, and 8 empty frames, along with all of the queen's followers, into a deep brood box. Above the brood box is placed a queen excluder and then a medium box with 10 empty frames. Then comes the double screen board, the remainder of the split hive with all of the brood, plus a medium box of stores.

The double screen board has entrances in the sides and at the back, so that the bees in the top colony can come and go separately from those in the queen box. Foraging bees returning to the hive will automatically fly down into the front entrance which leads into the queen's colony at the bottom of the stack, boosting the queen's population of foragers.

The queen and her foragers think they have swarmed, and they set to work establishing a new colony in the bottom brood box. The purpose of the medium box above the queen excluder is to dissipate the queen's pheromones and thus allow the top colony to produce their own new queen. Meanwhile, the foragers can make their way through the queen excluder to draw out the frames in the medium box above and store nectar and pollen.

The colony above the screen board is left strictly untouched for 4 to 5 weeks while the bees, realizing that they have no queen, set about raising a replacement queen or two. This colony—in a deep box plus a box of stores—can be strapped together with a ratchet strap, lifted up and set aside to allow for inspection of the lower colony. Both colonies can be fed if necessary, the lower one using a Boardman feeder, the upper one using plastic baggies filled with sugar syrup set above the inner cover with a feeding shim in place.

2 weeks after the initial split, we inspected the queen's colony in the lower deep, to find that the queen had laid several new frames of brood and the large population of workers had set up a collection of swarm cells. We immediately took the decision to split this hive again, before the bees swarmed. We simply repeated the process described above: queen below and the rest of the colony above. To prevent a veritable skyscraper of bee boxes, we moved the queen's colony and the new split offsite, leaving the original split colony on the stand.

Down the road 2 more weeks, and it was time to inspect the queen's colony to check up on progress. Again, we set aside the new top colony of bees without inspecting them. We then checked through the original queen's brood box, and found that there were now 6 full frames of brood, with several frames of stores in the medium spacer box above the queen excluder. There is no stopping this 2017 queen! This queen and her colony have since been returned to home site, the queen excluder removed, and a second deep added under the medium spacer box with the new nectar stores. The second split from this hive was left offsite for a further 10 days, by which time a new laying queen had been successfully produced. We did not want to risk moving the split too early, in case the newly-emerged queen was off on her mating flights, only to return and find herself homeless.

One big lesson we learned from this exercise: wait at least 5 weeks from the day you make the split before checking for the new queen or eggs. Although in theory the new queen will emerge just 16 days from the day the split was made, she still needs to mature, then go on her mating flights, then settle in for a day or two before she starts egg-laying.

And what is the result at the end of this 10-week period? We have the original 2017 yellow queen and her large colony of bees plus several frames of brood in all stages of development; the queen is home-raised, with proven egg-laying ability and good genetics. In addition, we have two new sister colonies of bees with their newly-emerged queens, the daughters of the original yellow queen. And best of all: no swarms to watch flying off over the horizon!

Of course, making splits does mean that there is a break in the brood of the colonies that have been forced to manufacture new queens. On the plus side this is an excellent way of reducing varroa mite numbers, while on the minus side the smaller colonies mean less foragers to take advantage of the spring nectar flow. On the other hand, had the original colony been left to its own devices, it is a given that the queen would have left with a swarm—and there may have been after swarms as well, which would have resulted in reduced forager numbers in the hive.

An alternative method of splitting hives using the double screen board method would be to kill either the original queen or the new queen and recombine the split. In this way swarms are prevented and the large bee population will produce a good crop of honey.

All in all, making the hive splits has been a positive exercise and an excellent learning experience.

- Hilary Forsyth