



njbees.org

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NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION OF NEW JERSEY

A division of New Jersey Beekeepers Association

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Meeting on: **Friday, August 19th at 7:30 PM**, Location: **Ramapo College of NJ, 505 Ramapo Valley Rd., Mahwah, NJ 07430**



Bee Enthusiasts & Bee Curious always welcome!



Weather permitting.



Please join us on **Friday, August 19th** when we pick up again with our BeeTalk® series where the emphasis is on you and your questions. The subjects will be feeding, dealing with the dearth and winter prep. Please join us this Friday to be educated and entertained!

John Gaut be at the meeting at 7:00 until 7:15 to cut and sell #8 hardware cloth (screen) used to prevent robbing. The pieces will be 36 inches wide cut to length. Each linear foot will be a \$2 donation to the club.

Yearly Dues are payable now!



Your \$25 yearly dues goes to fund all of our activities, our post meeting refreshments, club supplies and all other necessities required to bring the best possible programs, headline speakers, classes, mentoring and to introduce new beekeepers to the art and craft of the hobby we all love so much. See Bob Jenkins to make your timely dues payment and from all the officers,

“Thank you for your continued support.”





Message from the President:

Happy Hot and Soggy August NJ Beekeepers!

Well, this has been quiet an unusual summer. What started as the summer of swarms has turned into the summer of saunas, or with this heat, that's what it feels like. If anyone ever asks what it takes to be a beekeeper, simply tell them in record breaking heat-wave weather like this, we like to put on more clothes--and light a fire--when we go outside! Seriously, when it's this hot, it's hard to go outside, let alone go into your hives, but it is important to do regular inspections to make sure your bees are healthy.

In the theme of a weird summer, after I extracted my honey, I put my empty supers on top of the inner cover so the bees could clean them out. Later, when I was checking on my hives, I realized several of my hives had stored and capped honey in my supers -- above the inner cover. This once again proves that bees don't read the bee books, so they don't "know" that they're not supposed to do this. What amazed me even more was that the nectar flow was still on! I didn't pull off my supers until mid-July, weeks after I heard we were in the dearth. I do think this is going to be a record-breaking year for honey production in our area, and if you had asked me back in early May, I would have said it was going to be a tough year. But, that's part of beekeeping, accepting that part of the equation to a good year is out of your control. Personally, I enjoy how beekeeping is never predictable and always throws something new at you. You have to view it as a game and ask yourself, "Which puzzle are my bees going to ask me to solve today?"

As Beekeepers, the single most important thing we can do is treat for mites, and now is the time to do it. Successfully treating for mites in August will ensure your bees survive the winter. For experienced Beekeepers, now is the start of our year. Keeping bees healthy all year depends on what you do now. Having strong bees that can survive the winter takes strong bees to care for them as larvae, which means treating now ensures you have the multiple generations of healthy bees you need going into winter. Or to be more direct, if you only do one thing this year, make it treating for mites in August.

At this Friday's meeting we will talk about the dearth, when to feed, what to look for, and what we should be doing. So while it's hot enough to fry an egg on your top cover, we still have to brave the heat and work our hives.

I look forward to seeing everyone on Friday.

Frank Mortimer
President, Northeast NJ Beekeepers



Beekeeping in August

John A. Gaut

I hope everyone is enjoying the summer. July was another very busy month for me; harvesting honey, raising queens and preparing for and attending the Eastern Apicultural Society conference in Galloway, New Jersey.

The EAS conference was great! The NJ team and EAS put together a GREAT program. Many NJ beekeepers attended and learned a lot. Tim Schuler was awarded the Divelbiss Beekeeper of the Year. Each year a beekeeper is selected based on their contributions to Apiculture and education of the public. Tim truly has earned this award! Overall the New Jersey Beekeepers worked together resulting in a great conference. We have a great NJ Beekeeping organization.

The dearth is here! There is a little nectar coming in by me but not much so I began tactical feeding. I did install screens across 80% of the entrance to most hives to help the colony defend itself against robbing. And I have been monitoring for mites. Some hives have very low levels and some have exceeded my threshold of 1%. I treat all the colonies once I see the mites go above 1%. Mite populations can explode quickly this time of year. The mites are reproducing at exponential rates while the bee population is steady or decreasing slightly.

There are several good treatments including ApiGuard (thymol gel) and MAQS (Formic Acid), once the weather cools!

Here are the Tips on using MAQS:

- Apply only when the daytime high is forecast to be less than 85 F for the next 3 days; less the 80 is even better.
- Apply the strip in the evening; ideally an evening when it will be cool overnight.
- Close the bottom board (insert the IPM board). THIS IS VERY IMPORTANT!

- Remove the entrance reducer.
- Refrigerate or freeze the MAQS before application to reduce the initial evaporation of the formic acid.
- Minimize the disturbance to the colony; open the colony, place the strip and close the colony quickly and gently. Use only a few "breaths" of smoke.
- Remove the strips after application when you are doing the second treatment or taking the mite counts.
- Watch this video: <http://nodglobal.com/maqs-application/>

Since it has been hot, and I have the honey supers off I decided to treat with ApiVar. I do not plan on harvesting a fall crop of honey. I would have liked to use MAQS but the weather was not cooperating. It is too hot for both MAQS and ApiGuard.

What is Tactical Feeding? Even though it feels like 100+ F, we need to help the colony get ready for winter. The colony will need healthy "winter bees" that enable it to survive the winter. (Winter bees are physiologically different than summer bees, enabling them to live for 5 to 6 months.) The colony needs to continue to raise healthy brood now; these bees will be raising the bees that will raise the winter bees. The colony should be fed some sugar syrup to stimulate the colony to continue to raise new bees. Tim Schuler recommends about a gallon a week as a guideline. During your inspection, you should see several frames of brood with nectar or honey (and pollen) above the brood. The larva should look moist and well fed. (The youngest larva should be floating in a little jelly.) If you do not see much honey and there is limited honey in the rest of the hive, you may need to increase the amount being fed. If you see the brood nest being backfilled with syrup, reduce or temporarily stop feeding. The queen needs space to lay her eggs. The gallon a week is a starting point. You need to assess the stores in the colony and the forage available and adjust the amount feed each week.

Robbing is a possibly this time of year. Robbers will try to enter any small opening into the hive. Seal up all these openings! Many beekeepers put an entrance reducer on the hive to make the entrance more defensible. But the robber bees follow their noses (actually antenna) and focus in on the smaller opening. Robber screens are much more effective. A robber screen takes advantage of bee behavior: A robber will not go over a screen to enter a colony; a worker from the colony will find her way over the screen if the colony is hers. Robbing screens can be purchased. I make my own out of #8 hardware cloth (screen). The screen covers about 80% to 90% of the entrance. The guard bees are concentrated at the smaller entrance and can provide a more effective defense. A screen allows for better ventilation than an entrance reducer too.

When you are feeding, be very careful not to let any syrup drip on the ground or on the hive. Be sure the feeders are not leaking. The extra syrup will attract other bees and potentially set up a robbing situation. Feed in the late evening to minimize the robbing behavior.

Also minimize hive manipulations during the dearth. I always have more and more "interested parties" (robbers) the longer I have a hive open now. I use a quiet box and covers to reduce exposed frames.

We received an adequate amount of rain so far in August. The golden rod is blooming and there are a lot of honey bees and other pollinators working every last bloom. Let's hope the dearth will not last too long!



Hopelessly Queenless and Laying Workers

John A. Gaut

Sometimes a colony becomes queenless. This year more colonies than usual have become queenless. The increased frequency is likely due in part to the increased swarming this year. When a colony swarms, they leave behind a new queen and about half the workers. The new queen is often still in her queen cell when the colony swarms. The queen or more likely queens will emerge a few days after the swarm. Sometimes there are after swarms and the virgin queen(s) go with the after swarms. One or more virgins should stay behind but swarming is "controlled chaos" and all the virgins may leave. Or the remaining virgins fight to the death and both die. Or the virgin does not return from her mating flight. The result of these scenarios and others is the colony becomes queenless with no young larvae for the colony to raise another queen. The colony has become "hopelessly queenless."

If the condition is recognized before all the capped brood emerges, the beekeeper can introduce a new queen. Introducing a new queen after a swarm is risky though. The introduction is successful if there is not a virgin queen present. Often there is a virgin queen and she will quickly kill the introduced queen. (Virgin queens are difficult to find in a colony; they are only a little larger than a worker and most instinctually will run and hide.)

If all the capped brood has just emerged, more capped brood can be introduced from a strong colony along with a queen. Again there is a risk there is a new queen already in the colony; one of the queens will die. Maybe both!

If the broodless condition goes on for a 2 to 4 weeks, some of the worker will start laying eggs. All workers have small ovaries (much smaller than a healthy queen). The pheromone from the brood suppresses the development of the workers ovaries. The queen pheromone also suppresses the worker ovary development, but the brood pheromone is the primary suppressor. The eggs the workers lay are not fertilized so they can only develop into drones. The signs of laying workers are multiple eggs in a cell (usually on the side and not in the bottom) and drone larvae where worker larvae should be.



Once a colony develops Laying Workers, they believe they are queenright. A colony will develop 100s of laying workers, as many as a third of the worker population. Because the colony thinks they are queenright, introducing a queen is very difficult and usually not successful. Recent research has found the laying workers actually produce pheromones similar to the Queen Mandibular Pheromone, QMP. All the workers, not just the laying workers will attack an introduced queen.

What are the options if you want to save the bees?

Option 1

One approach is to take the hive a few 1000 feet away from the original location and shake all the bees onto the ground, then return the empty hive back to the original location and introduce a queen (or queen cell or a frame of eggs and larvae). The theory is the heavier laying workers will not be able to fly back. (My experience is that they beat me back! All the bees including laying workers and drones fly back and none remain on the ground. They are waiting for me when I set the hive back in the original location!!) The colony will usually attack the queen, or tear down the queen cell. They will not start their own queen cell because they think they are queenright.

Option 2

Another approach is to put frames of brood in the colony. The pheromones from the brood suppress worker ovary development. A few frames of brood must be put in each week for 3 weeks and then a queen can be introduced on the 3rd week. Introducing a queen along with 3 to 5 frames of brood from her colony may be successful if she is caged over emerging brood and then released 3 to 5 days later. There is still a risk the colony will not accept the queen and the process requires taking brood from another colony, weakening it.

Option 3

The other option is to combine the queenless colony with a strong colony with lots of brood. The queenless hive is placed over a queen excluder on top of the strong colony. The pheromone from the brood will suppress the laying workers. Workers from the strong colony will go up through the queen excluder and “police” the laying workers (remove them and their eggs). Again there is a risk of queen loss and the strong colony will now be under stress. (Some laying worker colonies develop European Foul Brood due to the stress.)

Option 3 is usually the best option if you want to save the bees. The other options are not usually successful. There are risks with combining the colonies but can be beneficial if the population of the queenless hive is large and there are not too many drones. The honey comb from the colony is protected by the combined colony. Often the weaker laying worker colony will be robbed by other bees and yellow jackets. Wax moth or Small Hive Beetles will attack the comb in a weakened laying worker colony.

Many experienced beekeepers do not think it is worth the time or effort to save the colony. (The hive of bees is not really a functional colony without the queen. The bees will only live for a few more weeks at the most.) All the bees are shaken out of the hive; the hive is set in a new location and started over again (with a nuc or frames of bees from another colony and a new queen). Or the equipment is stored for the next season.

One final thought: The colonies overall objective is to swarm and reproduce. A queenless colony is not going to be able to swarm and reproduce. But laying workers is one last way a colony can reproduce its genetics. The whole colony may not be able to reproduce (swarm) any more, but the drones can mate with other queens and the laying worker colonies genetics will be part of the mated queen’s colony. Amazing!



HONEY BEE DAY

SATURDAY, AUGUST 20TH. 10AM - 2PM

What's the buzz about bees?

Help us celebrate these important creatures and their crucial impact on the environment!

Learn all about bees - hive life, flower pollination, delicious honey, and more! Meet John, our beekeeper, and try honey from our fields.

- Honey Tasting Table
- Q & A With Our Beekeeper
- Observatory Bee Hive in the Market|

See our very own bee boxes in the field!

**I know it's small but does anyone recognize the beekeeper pictured above?
It's none other than our own John Gaut!**



**FOR SALE
BY OWNER**

★ Package bees, queens, complete nucs for sale (North NJ) 🗑

image 1 of 13



Italian package bees, queens and complete nucs for sale. For pickup only.

<http://newjersey.craigslist.org/grd/5713228213.html>



One of our members is selling her hives (4 plus an empty nuc) and extractor. All are in good condition. There has been some interest, but I do not think they are sold just yet. If you are interested please see one of the officers and you will receive the sellers contact information.



Next month (September) is Honey Cup month for the Northeast New Jersey Beekeepers. This year we have secured a larger venue (Pavillion) at Ramapo College and the Honey Cup will be bigger and better than ever! It is a huge undertaking for our branch and it will only be possible if we get enough volunteers. Please consider giving back to your club by signing up to volunteer to help set-up, man a station and/or tear down at the conclusion. There will be a sign-up sheet at the meeting on Friday or feel free to contact one of the officers (email info@nnjbees.org or use the phone numbers in the masthead of this newsletter). Let's make this years Honey Cup even better than last year!

Volunteers!





Joined ▾

➦ Share

✓ Notifications



1,540 Strong!!!

We quickly blew through the 1,500 member milestone and are, as of this writing 1,540 members strong, and growing on our Facebook page! Be sure check it out. See the great pics and stories posted by the Facebook fans we have at our page.

Remember: <http://www.nnjbees.org> is your website! Check that site for everything Northeast New Jersey Beekeeping!

❖ Volunteers ❖

Celia Miller	Refreshments – Cakes, cookies, brownies, tea, etc.
Jennifer Phillips	Refreshments – Cakes, cookies and other treats
Billy Neumann	Club photographer
Hugh Knowlton	Workshop/Event coordinator and presenter
Mike Miller	Club apparel
Emma Stein	Resident artist
Bob Slanzi	Meadmaster

Next Month

The Northeast NJ Beekeepers is proud to sponsor the Annual **Honey Cup**! Bring a pound of your hive's honey, enter it in the Honey Cup and have our members judge how it stacks up. Have the most fun legally allowed in New Jersey! Bee There!!