



# June 2018



#### NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION OF NEW JERSEY

A division of New Jersey Beekeepers Association

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Meeting on: Friday, June 15th at 7:30 PM

Location: Ramapo College of NJ, 505 Ramapo Valley Rd., Mahwah, NJ 07430



## Got Mites? Get Apivar! The Club will bee selling Apivar at Friday's meeting. Apivar 10-pack = \$35.00





### Message from the President:

Happy June Northeast NJ Beekeepers!

Summer is here and the bees are buzzing. The nectar flow has finally arrived, and it's been more like a nectar tsunami than our ordinary flow. Instead of a slow and steady flow in April and May, the nectar began flooding into my hives sometime in the last part of May. I think my bees must have been more anxious than me about getting started on this year's honey crop, because they made up for all the lost time by filling and capping most of my supers in just a few short weeks.

I usually like to extract once a year, and I just keep adding supers on top of my hives until I'm ready to pull them all off them and extract. However since my bees filled up my supers in such a short amount of time, I started thinking about this year. I realized that we still have 5-6 weeks of the nectar flow to go, meaning that the bees have plenty of time left to make even more honey. So I decided that instead of adding new supers with just foundation, I would get more honey if I extracted the honey I already had, then put the supers back on my hives for the rest of the flow, giving the bees plenty of drawn comb to fill with more honey.

My strategy with my supers has always been to add two supers per hive at the beginning of spring, hoping the added room will help to alleviate swarming instincts in my colonies. My thought is that I would rather have brood in my supers than watch my honey producers fly away in a big swarm. Most times, the queen will go up into the supers to lay, and once the brood in the supers hatches out, the bees backfill those

frames with honey. Since we are only at the very beginning of June, I still had a brood in more than half of my supers.

So, here I was, in the first week of June, and I ended up extracting just over 370 pounds of honey from 10 fully filled and capped supers. Then within 24 hours of pulling those supers, I was able to get all of them back on the hives, once again ready to bee refilled with honey.

Afterwards, as I thought about how I had completely changed my approach to extracting, I thought about many of the other bee-related practices that I have changed throughout the years. For example, I never would use queen excluders, until last year when I put them on 24 days before I was planning to extract, thus ensuring I would not have to worry about any brood while I was harvesting my honey. This year because I needed to work fast, instead of bee escapes, I used fume boards and Fischer's Bee Quick, the 100% all natural, food grade blend of oils and herbs that actually smells good. I have since concluded that I will bee building a big bonfire and torching my bee escapes because I never want to use them again after seeing how the fume boards worked so incredibly well. Thanks to Fischer's and the fume boards, for the first time I didn't have several dozen bees riding in my car or buzzing through my house, which was a real plus since both my daughters, if they could, would love to pet and hug a few bees, and now I didn't have to worry about that happening.

Then it occurred to me that to successfully keep bees, you must always bee willing to change what you're doing, no matter how well "your system" has worked in the past. We always joke that the bees haven't read any of the books as a way of saying that the bees are going to throw you a lot of curveballs, so don't expect them to follow any stepby-step guidelines or recipe for good beekeeping. Just when you think you know what you're doing and have a "surefire" system, the bees or weather change the playing field and you have to rethink what you should do.

The longer you're a beekeeper the more you realize that reading the bee books, taking classes, going to meetings, and caring for your bees all prepare you for what you should bee expecting and what you should bee doing. However, it's always important to remember the golden rule of beekeeping: To bee truly successful, never try to fit the bees into your system, instead build your system to fit the bees. Beekeeping knowledge provides you with the tools you need to bee successful, and just like a craftsman needs to use the right tool for the job, the same is true for the craft of beekeeping. Let the bees tell you what the job is, then use the correct tool to give them what they need.

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Frank Mortimer President, Northeast NJ Beekeepers

## **Beekeeping in June**

### by John A. Gaut Master Beekeeper, EAS

### The Fun Begins!

We have worked for this season since fall last year. We have treated for mites and managed the colonies so they are strong and healthy in the Spring. And now the reward, a beautiful nectar flow!

I am just starting to extract. I have a few colonies that have supers stacked so high I cannot easily put another super on. I bottom super (to reduce the swarming impulse) so I have to lift all the heavy supers off before adding any more. Once I finish an initial round of extraction and there is less swarming pressure, I'll put queen excluders on all my colonies. Some people do not use queen excluders; they consider them "honey excluders." I find the bees work effectively through the queen excluders when there is a good nectar flow and there is empty drawn comb above the queen excluder. After I verify the queen is in the lower brood boxes, I put a queen excluder above the brood boxes and under the honey supers. The supers have drawn comb; no foundation. I do this at least 24 days before I extract for the last time. Any brood, including drones will emerge in the 24 days and the bees will backfill the brood cells with honey. Now is a good time to install queen excluders to eliminate brood in the honey supers. (Any larva in the extracted honey will give the honey an off flavor.)

While you are going through your hive looking for the queen to verify she is in the brood chamber, a mite test can also be performed. Once you know where the queen is, take a frame of open brood and shake bees off into a container and they measure ½ cup of bees (approximately 300) and perform an alcohol wash. I'm currently finding very low mite counts in my colonies. Most of the mites are in the capped brood so do not show up in an alcohol wash.

The more brood the colony raises, the more mites they raise as well. Total mite counts are typically highest in the biggest colonies. While there is capped brood, mite counts can be misleading because up to 80% of the mites are in the capped brood. Alcohol washes are still important. Once the mite count exceeds 1%, I treat with MAQS. Otherwise the mite population, and viruses explode in July and August. Then the colony suffers with a virus

epidemic! I often hear a beekeeper say they lost their biggest colony. They do not seem to understand big colonies can have huge mite populations.



Both sides of this frame were about 75% full on capped brood. That is about 5000 bees! A strong colony that raises a lot of brood also raises a lot of mites!

Before I treat, I sample every hive for mites. I find there is variability between colonies. 4 out of 5 could be low but that 5<sup>th</sup> one is high. If I did not sample that high colony, I could make incorrect decisions. I find MAQS works well for me. I follow a protocol that minimizes bee and queen loss while maximizing the MAQS effectiveness.

#### 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. Lower humidity is ideal.
- 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 any entrance reducers.
- Refrigerate or freeze the MAQS before application to reduce the initial evaporation of the formic acid.
- <u>Minimize the disturbance to the colony</u>; open the colony, place the strip and close the colony quickly and gently. Use only a few "breaths" of smoke. DO NOT perform a hive inspection and then apply MAQS the same day. Wait at least a day after any inspections.
- Remove the strips after application when you are doing the second treatment or taking the mite counts.
- Watch this video: <u>http://nodglobal.com/application-usa/</u>, especially the personal safety instructions.

I will try the new formulation, MAQS Pro this year too. The label instructions are slightly different. The MAQS Pro strips remain in the colony for an additional week.

Queens do frequently stop laying for a few days during MAQS treatment. Sometimes I lose a queen. These are typically older queens and I'm ready with a young vigorous queen if needed. (I would typically be replacing these older queens anyway.)

Other treatments that are also effective are Apiguard, Api-Life VAR, and Apivar. The honey supers must be removed if you are using any of these treatments. Honey supers can remain on the hive if using MAQS (and not feeding).

Enjoy the rest of the summer. I'm looking forward to seeing some of you on the hive inspection tour with Tim Schuler and Hugh Knowlton on Thursday and Friday. And our Friday evening meeting will be very interesting listening to Tim and Grant.



### <u>My Colony Swarmed! When Will I See Eggs?</u> by John A. Gaut

I have had a lot of questions about "queenless" colonies. Often, the colony may not be queenless, the new queen just had not started laying yet. Also, a colony that supercedes the queen will look queenless for a few days to over a week.

I use an Excel spreadsheet to manage my queen rearing schedule. I simplified the Excel sheet so it could be used to predict the dates a new queen would begin laying eggs after a swarming or supercedure event. While the predicted dates may vary due to several factors, you can see <u>the new queen takes about 3 to 4</u> <u>weeks before she starts laying!</u> This means the colony will be broodless for a while; a few days or a week. If the colony has an after-swarm, the timing may be even later.

Here is an example. June 1<sup>st</sup> entered into the YELLOW area and the rest of the dates were calculated in the spreadsheet.

	Note: The predicted dates may vary a few days!			John A. Gaut
7	Enter Or the	<pre>the Date the colony Swarmed&gt; e Supercedure Cell was capped</pre>	Thursday, June 01, 2017	10
Date	٩n	Hive Status	Notes	Actual Date
Nednesday, May 24, 2017	0	Egg laid in Oueen Cun	Hotes	Actual Date
Sunday, May 29, 2017	4	Egg has batched into a lang now		The second se
Thursday, June 01, 2017	8	Cells capped.	Swarming usually occurs when the first cell in capped or nearly ready to cap. Poor weather may delay the swarm. There is usually multple swarm cells.	-
Friday, June 09, 2017	16	First Queen emerge. Queen will try to terminate other queens.	Small cell queens may emerge earlier. "Enlarged" queens may be on time or a day or two late. In hot weather expect them a day early. In really cool weather they may be a day late.	
Wednesday, June 14, 2017	21	First possible day to mate		
Tuesday, June 20, 2017	27	Possibly Still Mating if weather was poor		6
Tuesday, June 20, 2017	27	First day eggs could be found. Look for eggs.	Weather can set timing back. Check again in about 5 days and then again in 5 days.	
Sunday, June 25, 2017	32	Treat with Oxalic Acid Dribble 3 to 5 mL of 2.8% OA:50% Sugar Solution per seam of bees, a maximum of 50 ml per colony Any old Brood has emerged and new brood has not been capped.		
Friday, June 30, 2017	37	If no eggs are found by now the queen isn't going to lay or will be a drone layer (or it is so late in the year the bees don't want to rear brood). Remove the queen and requeen or combine.	If a queen is not present, laying workers may be laying eggs. If there are eggs, verify they are layed by a queen and not laying workers.	
Friday, July 14, 2017	51	Evaluate Queen for egg laying pattern. If pattern is not satisfactory, consider requeening.	The queen should have been laying for 3 weeks or more and a capped brood pattern should be evaluated.	

### Where Does Your Honey Come From?

Bees Forage Up To 3 Miles Away From Their Hive: 1 Square Mile = 640 Acres 3 Mile Radius = 28.28 Square Miles

Total Acreage 1 Hive Covers = 18,095.6 Acres



### The new "Honey Presser" purchased by our club for the Malawi beekeepers is now in use.





## **Beekeeping Memories**

#### **Capturing Swarms**

by

#### **Karl Schoenknecht**

Anyone that keeps bees for a long time will find their hive has swarmed even though they worked hard to prevent swarming. Back in the 1980's, swarming was fairly common because the Varroa mite problem was not yet in our area and there were fewer developed properties. This allowed untreated hives to have good foraging sources and survive most winters with large numbers of healthy bees. If a hive has a lot of bees and brood in April, it will likely swarm. I remember my first swarm.

I just came home from work and went to look at my hive before it got dark. The hive looked normal but I noticed a swarm in a bush about 10 feet away. I raced back to my garage and grabbed a bottom board, brood box with drawn comb and a cover and placed it near the swarm. I then went back to my house thinking "How am I going to shake those bees out of a bush?" I made some sugar water thinking that I could spray the bees to keep them weighed down and less likely to fly away. When I returned to the swarm they were already walking into the new hive that I just put next to them. Sometime later when virtually all the bees were in the new hive I moved it next to my first hive.

Another time, my wife Helen called me at work to tell me that my hive swarmed into the peach tree. Helen said she would try to catch them. When I got home that evening, the swarm was gone. Helen said she put on my bee suit and shook the bees into the brood box like I told her but the bees flew back into the tree. She tried three times but said she stopped when a bee wound up inside her veil and scared her. I lost that swarm but learned to check my hive more often.

I tried splitting strong hives in past years but I was not successful until I found two capped queen cells in my hive early one May. I previously started keeping three brood boxes to allow the bees to build a larger colony and store more honey for over wintering and my plan worked well that year. I found 2 large capped queen cells (swarm cells) on the bottom of a frame in the middle box and the old queen was in the top box starting a nice brood pattern. I took the entire middle box to a new location and started my first successful split of a hive. A couple of years later my three box hive had problems.

After a mild winter my super hive with 120 pounds of honey and at least 30,000 bees was sure to need splitting or so I thought. When I checked the hive at the end of February I found only a little drone brood and no honey. The three box hive was wall to wall bees but there was no food other than the nectar from some early blossoms. I decided not to feed a queen less hive and it was too early in the season to get a new queen. A few weeks later the hive had lost more than half of the bees but the remaining bees were bringing in pollen and I found a laying queen with a beautiful brood pattern. I now realize that the old queen was probably worn out and was superseded but the new queen remained unfertile until drones hatched out in March.

This year was unusual because I did not see any swarm cells when I looked in April and was happy to find only one mite with the alcohol shake test. I added honey supers to give the bees more space. On May 5<sup>th</sup> I found an open swarm cell showing that a new queen already hatched. I decided to split the strong 3 box hive, making sure the old queen stayed with the original hive. The old queen was heavy with eggs, had trouble walking with her heavy load but was easy to spot. I moved the entire bottom box that had several frames of capped brood and honey. I added a second box of foundation to the new hive then swapped three of the foundation frames with brood and eggs from the original hive so the new hive could make a queen. The bees had their own ideas.

On May 9<sup>th</sup> the original hive swarmed into a tall maple tree while I watched. A few minutes later the swarm flew back down and into the new hive. I checked both hives again on May 14<sup>th</sup> and noted that both hives were active and bringing in pollen and honey but only the new hive was drawing out comb on the foundation. With fewer bees and extra drawn comb in the original hive the bees seemed content to just bring in honey and not work hard to draw out foundation.



The taller original hive on the left just after it swarmed.



The swarm that formed only minutes before it moved down into the new hive.



The bees and new queen from the swarm went into the hive on the right but some bees were confused as to which hive to go into. A short time earlier some of the bees were collecting honey for the original hive.



Our Facebook Group has **over 1800 fans** from all over the world! It's a great place to connect to other beekeepers, so bee sure check out all the great bee pics, bee stories, and bee info.

Find us on **Facebook** 

**Remember:** <u>http://www.nnjbees.org</u> 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		
_	Mike Miller	Club apparel		
	Bob Slanzi	Meadmaster		

### **Next Month**

The How-To's of Honey Extraction

--Club Bee Talk Series



The First Rule of Bee Club: Tell Evervone about Bee Club!