





# **April 2019**

#### NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION

A division of the New Jersey State Beekeepers Association

President	Frank Mortimer	201-417-7309	3 <sup>rd</sup> V. Pres.	John Matarese	201-481-5426
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2 <sup>nd</sup> V. Pres.	Jaimie Winters	551-486-7479	Treasurer	<b>Bob Jenkins</b>	201-218-6537

Meeting on: Friday, April 19 at 7:30 PM

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



Bee Enthusiasts & Bee Curious Always Welcome! Dook for the Bee-u-tiful Yellow Signs





## This Month's Meeting: **Installing & Caring for Your New Nucs**





Message from the President:

Ready-Set-Go!

Hello Northeast NJ Beekeepers, it looks like Spring has sprung, and the great nectar race of 2019 has begun!

By the end of the week, everyone should have their bees and the best season for keeping bees will bee off and running. After last year, I have decided to stop trying to guess what kind of year we're going to have, especially since I was so worried that I was going to get less than a bucket full of honey and ended up having my best year ever. But, as the always-eternal optimist, this year, I am expecting only the best! We've had plenty of rain, which could/should mean a strong heavy bloom, which could/should mean lots and lots of honey!

Last year, one of my bee yards had a lot of small hive beetles (SHB), and I am curious if they will continue to be a bigger and bigger concern for all of us in North NJ.

A few weeks ago, when I was pulling my Apivar strips, I saw SHB in a few of my hives, so I put beetle traps in those hives. If you start seeing growing numbers of SHB in your hives, please let me know, as it will be good for our club to track how prevalent they become in our area.

I am proud to say that our club has decided to restock as well as bring in some new bee books for our members. On page 16 in the newsletter, you'll see a full list of the books we now have, and I encourage everyone to see what's available. Books are a great reference and it's always easier to flip through a book to find an answer, than trying Google and ending up with a bunch of bad or misinformation. Also, all of our books are offered below retail, so you're not going to find a better deal than what you can get from your very own Bee Club. One of the new books we're brought in is: "Honey From the Earth: Beekeeping and Honey Hunting on Six Continents" by the world-renowned French photographer, Eric Tourneret. It is a gorgeous, coffee table book with page after page of beautiful full color images. Tourneret's photos are amazing and will be make you proud to be a beekeeper. (On a side note, Eric Tourneret, is a long time member of our club's Facebook page.)

To all our new and relatively new members, I'd like to offer you some advice: As we move through the season, you are going to have a lot of questions, and there may be some times when you might not be sure what's going on in our hive. Your impulse may be to just pick up your phone and dial or text your mentor, but before you do, make sure you can answer these five questions:

- 1) Did I see the queen?
- 2) Did I see signs of the queen, specifically: Capped Brood? Larvae? Eggs?
- 3) How many frames of brood did I see?
- 4) How much honey/nectar do the bees have?
- 5) Did I see anything weird?

If you can answer these questions, and you still need answers, then you can reach out to your mentor. As I always say, Beekeeping is not a spectator's sport, and you have to be in your hives to truly call yourself a beekeeper. That's why the club brings in so many books; we want you to have a resource at your fingertips that will help you to bee a better beekeeper. Last year, I wrote an article for Bee Culture's sister publication, Beekeeping: Your First Three Years. You can read my article on being prepared before asking for help at:

http://www.beekeeping3.com/2018/03/01/prepared-ask-help/

I am looking forward to another great spring and summer! We'll kick off the season with our April meeting, which will be focused on nucs. If you're getting a nuc, or just want a refresher on what to do, please stop by for Friday's meeting. Also, please note that Friday's meeting will only cover installing nucs, and it will also be a short meeting. Last, Bob Jenkins will be at Ramapo starting at 6:30, so please get to the meeting early and finalize your nuc payments with him.

Here's to our buzz-tastic meeting!

See you on Friday!

Frank

President, Northeast NJ Beekeepers



## **Beekeeping in Spring**

## by John A. Gaut EAS Master Beekeeper

A new beekeeping season is here!

Fortunately, I have not heard of too many winter losses this year. Many beekeepers are learning how to effectively manage the varroa mites in their colonies. We all have Tim Schuler to thank for all the education he provided about mite management. It is truly amazing to see how quickly a colony builds in the spring when they do not have to deal with the stress and diseases related to varroa mites!

Here in northern New Jersey, we had a near normal spring. The temperatures did fluctuate, giving us some nice warm days to check on the bees. There were also some cold nights. Spring is a time of transition, from Winter to Summer and wide swings in temperature are typical. The bees seem to handle the variations in temperature well if they have enough honey near the cluster and are healthy. I find insulation on both the top the sides of hives are beneficial this time of year. The top insulation reduced condensation all winter and especially this time of year as the colony produces much more metabolic moisture while raising brood. The side insulation helps the hive retain the heat generated by the brood rearing cluster.





Above is a comparison of an Insulated Top and Non-insulated Top. Note all the condensation on the underside of the Non-insulated clear inner cover.

I treated all my colonies with ApiVar in January and February, then tested for Mites in late March and early April. Most of the colonies had zero or 1 mite per 300 bees. Some beekeepers assume since they treated the mites will be low and they do not do an alcohol wash. This is a **very bad assumption.** While many of the colonies will have low mite levels, there is also often one or two colonies that are higher. I test all my colonies so I can find these outliers. These outliers need to be retreated or they will suffer all spring and are potential mite bombs for the other colonies in the yard and area.

On the warmer days, I also removed the mouse guards and leveled hives as needed. Moving hives to level them is relatively easy now before they pack in a lot of honey. If there are any dead outs (mine or others), I try to analyze the cause of the loss. If you know the root cause of a colony loss, you take action to prevent a recurrence. A "cold snap" or "false spring" are not root causes. For example, beekeepers that think a cold snap killed their bees will likely experience the same loss next year. While a cold snap occurred just as the colony died, it was not the cause. Correlation is not causation! The root cause may have been viruses or too small of a cluster to maintain cluster temperature resulting from high mite loads. Beekeepers must analyze the root causes of losses and learn how to improve their beekeeping skills. A very good reference is https://beeinformed.org/2016/03/08/why-did-my-honey-bees-die/

As the weather warms, I will be inspecting colonies to verify they are queen right and they have enough food stores until the nectar flow is consistent. I count frames of bees and frames of brood to record the colonies progress. Weaker colonies will get a frame of capped brood with the clinging bees from a stronger colony. (I make sure the queen is not on the frame transferred!) The strong colony will get a frame of empty comb inserted next to the last brood frame, giving the queen more room to lay. Both colonies must be healthy for frame transfers. There is no sense in making a second colony unhealthy! Equalizing frames of brood now helps reduce the swarming impulse in the strong colonies while boosting the weaker colonies.



Above is a nice frame of brood. The brood is in the center with mostly capped brood (pupa). Next to the brood is plenty of pollen packed into the cells outlined in yellow. There is some honey or nectar in the top corners outlined in red. This is a good frame to transfer from a strong colony to a weak colony. The brood is older and does not need to feed. There is pollen and honey for the new bees as they emerge from the capped cells in about a week. The bees on the frame will maintain brood temperatures.

I also verify the water source for the bees does not run dry. I do not want my bees to begin foraging on the neighborhood pools for their water.

By May, many beekeepers have received their nucs or packages. If the package or nuc was installed in a hive with foundation, feeding will be necessary until at least 9 deep frames are drawn out with comb. Once 8 or 9 frames are drawn out, a second box of foundation can be added.

There has been a strong pollen flow in Northeast New Jersey from multiple sources including skunk cabbage and then maples. The weather was generally good for most of the maple bloom, enabling the colonies to build. I did see some nectar coming in from maples too! The ground moisture is also good in my area. As of the beginning of April, we are setting up for a productive year.

May will be peak swarming season. Over the years I have learned more about swarming and now practice Swarm Management. Initially I practiced Swarm Prevention or Swarm Control but found I was working against the bees and reducing my honey crop too! Swarm Management is a PROACTIVE approach that works with the bees. Swarming is an instinctive behavior. The colonies mission in spring is to reproduce by swarming, not produce honey. Swarm management reduces the swarming impulse by using the bee's instinctive behaviors so the colony does not start preparing to swarm (reproduce). See my recent presentation for more details. http://www.nnjbees.org/how-to/articles/swarm-info/

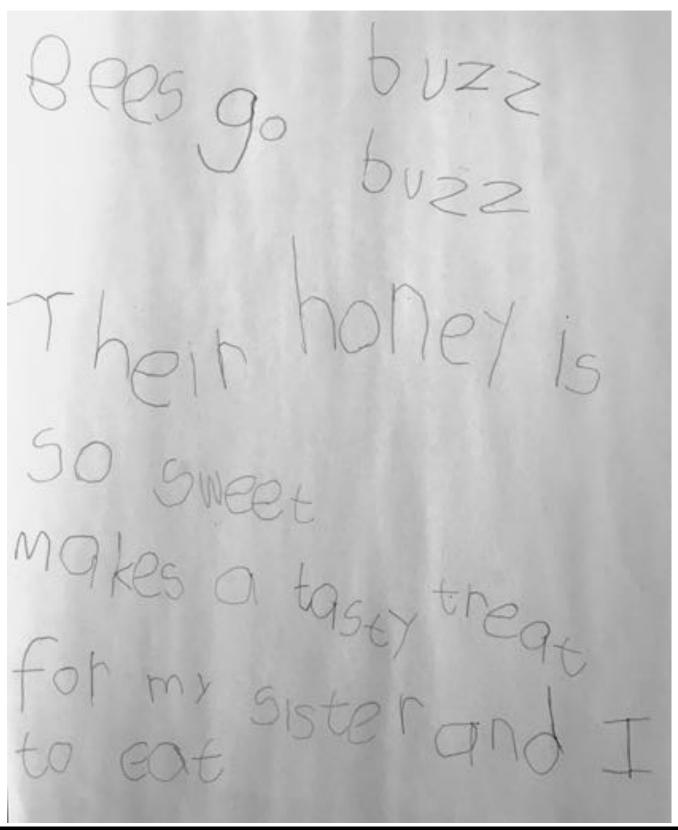
If your colony did swarm, you can use my Excel spreadsheet (also at the same link) to determine the timing of new brood in the hive. Enter the date your colony swarmed to get an approximate date when the new queen will begin to lay. Often a colony will be broodless for a short period of time after a swarm. A new queen will need about 3 to 4 weeks to emerge from her cell, mate and begin laying eggs. When the new queen starts laying, all the eggs laid by the older queen will have matured and emerged. This is about the time some beekeepers panic and start looking for a replacement queen. But the replacement queen is not accepted because the colony does have a queen, possibly mated but not laying just yet. (A waste of a good queen, time and money.) If a month after swarming you do not find eggs, the queen isn't going to lay or will be a drone layer (did not successfully mate). Remove the queen and requeen or combine.

I'm starting to raise queens now. It can be challenging early in the season. I do see enough drones in my drone mother colonies. But often the weather is not ideal. I'll try. Watching the bees raise queens is fascinating. The bees seem so proud of themselves when they are feeding nice queen cells.

New Queens being feed by the proud bees!



# Bee Poem by Svea Mortimer (4 ½ years old)



### Installing a Nuc (Nucleus) Colony in a Full sized Hive

#### John A. Gaut, Master Beekeeper

April 10, 2019

#### **Equipment needed:**

Full sized hive complete with Bottom Board, **Deep** Hive Body, Inner Cover, Top Cover

Frames with new foundation (all wax or plastic coated with wax) or frames of drawn comb

Feeder

Ratchet Strap

Protective Veil (Gloves are optional)

Smoker

Hive Tool

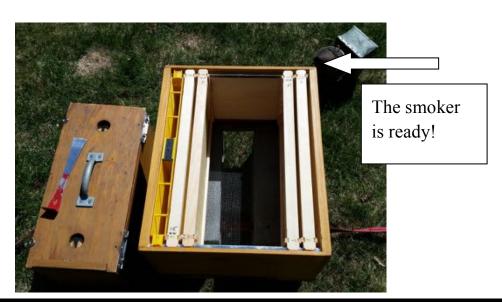
Set the hive in the final location, ideally a sunny spot with room to work around the hive (including at least 4 foot of space behind the hive). The hive should be set at least 8 inches off the ground (cement blocks are often used). The hive should be level. Ideally the entrance would face south and east for the early morning sun.

The hive body should have space for 5 deep frames from the Nuc.

Before moving anything, apply a little smoke to the Nuc. (Bees sense vibration; a little smoke will help keep them calmer.) Place the Nuc beside the full-sized hive.

This is a wooden Nuc box.

Yours may be corrugated plastic or waxed cardboard.



The entrance reducer should be in place as shown below.



Deep Hive Body

**Entrance Reducer** 

**Bottom Board** 

Remove all the frames (and frame feeder if used) from the new hive body.



Transferring the 5 frames from the Nuc to the Hive should be done carefully. The time from opening the Nuc to closing the Hive should be no more than 5 minutes, with the actual transfer of the five frames done in less than 3 minutes. Work deliberately, being gentle with the Nuc, hive and each individual frame. If frames are stuck together, it is fine to transfer two at a time. Transferring two frames at a time will speed up the process (especially important in cool weather) and cause fewer disturbances to the bees, including the queen!

Give the Nuc a "breath" of smoke and open the lid slowly. (Give the bees a few seconds to adjust to the open lid.)

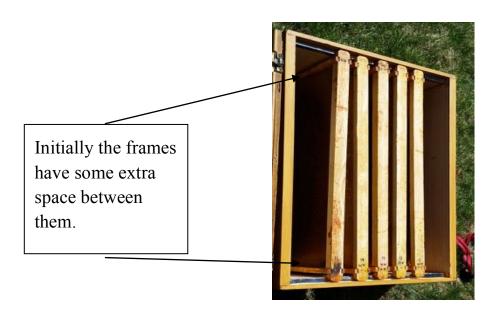
Note that the frames were moved to one side, allowing a little space to remove the first frame without squishing and rolling the bees.



Place one or two frames at a time into the new hive body in the same order and orientation as the frames were set in the Nuc. Give the bees a <u>little</u> smoke just before you handle each frame.



As you move frames, you can <u>briefly</u> look at the frames and make a mental note what is on each frame (e.g. Honey, Pollen, Uncapped Brood, Capped Brood, Eggs). You may see the queen, but do not spend time trying to find her. Handle each frame as if the queen was on the frame (keep the frame over the box, do not jar the frame and do not squish or roll any bees). Leave a little space between each frame as you put in the hive body.



After the 5 frames from the Nuc are in the hive body, place two more frames (foundation or comb) between the nuc frames and the outside of the box. Then gently and slowly move the 5 nuc frames together and toward the new frames. Then insert the remaining frame(s) and/or feeder.

If you are not using a frame feeder, all the frames will be foundation or comb.



If there is a mite treatment in the Nuc, place it in the same position in the new hive. For example, an ApiVar strip should be inserted slowly and carefully between two frames in the brood area. (If it is stuck to a frame, just leave it in the same place.)

Shake any bees remaining in the Nuc box into the hive. You can leave the Nuc box outside the hive so any stragglers can find their way to their new home. Make sure the queen is not left behind in the Nuc box.

If you have a jar feeder or pail feeder, place the feeder directly on the frames or above the handhole in the inner cover. Be sure to keep the feeder filled! Use an empty hive body to enclose the feeder with the outer cover on top.

If you are using a top feeder, place it on the frames. If you are using a top feeder, you can leave the inner cover off. Do not overfill the feeder. It is difficult to handle when it is full.

The Mann Lake Top Feeder has plenty of storage capacity

If you are able to feed frequently, only fill one side at a time. When the first side gets low, fill the other side and late the first side empty. This procedure reduces the risk of the syrup spoiling due to mold and fermentation.



Mann Lake Top Feeder on top of the hive

Place the top cover on the hive. A ratchet strap helps hold the cover on and may help hold the hive together if a pest tries to knock it over.

The ratchet strap runs through the core of the concrete blocks.



Record the date and your observations: Number of frames of Brood (Capped, Open Larva, Eggs), Amount of bees (number of frames covered with bees), Any unhealthy looking brood or bees, Queen if seen, Amount of honey and pollen.

#### Feeding the New Hive

The colony must be continually feed sugar syrup to enable them to draw out the comb on the foundation. They also use the sugar syrup to feed the young brood. The bees will consume a thin syrup (1:1) or thick syrup (2:1) and draw out foundation equally well on thin or thick syrup. Thicker syrup has several advantages; only half as much feeding is needed and the syrup is less likely to spoil. A thicker syrup is less likely to ferment. The addition of HoneyBeeHealthy or similar product helps reduce fermentation in thick or thin syrup. Once the colony only has one or two frames of foundation left to draw out, a second hive body with foundation can be added.

In Northeast New Jersey, there is typically ample pollen sources for the new colony so supplemental protein is usually not needed. Monitor the bees returning to the hive and verify some are carrying pollen back to the colony. In areas or times when limited pollen is available, supplemental feeding of a protein patty (UltraBee or similar) may benefit the developing colony. Only feed a small amount of patty at a time; the amount the bees will consume in a week to prevent Small Hive Beetle infestation.



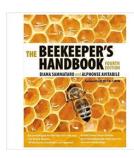
#### Northeast NJ Beekeepers Bee Books for Sale



## Beekeeping for Dummies

An excellent basic intro guide to beekeeping

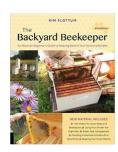
**Price: \$20** 



#### Beekeeper's Handbook, 4<sup>th</sup>

If you're only going to buy one book, this is the best guide to the hobby & profession of beekeeping

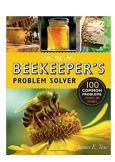
**Price: \$25** 



#### Backyard Beekeeper 4<sup>th</sup>

The premiere introduction to backyard beekeeping

Price: \$20



BEECABULARY

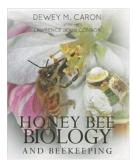
SSENTIALS

**NDREW CONNOR** 

#### Beekeeper's Problem Solver

100 Common Beekeeping Problems Explored and Explained

**Price: \$20** 



## Honey Bee Biology and Beekeeping

The only beekeeping textbook teaching college students & beekeepers the science & practice of bees & beekeeping

**Price: \$45** 



#### **Beeswax Alchemy**

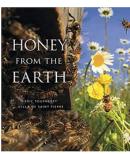
Over 40 DIY projects that's the perfect combo of recipe, craft book, & beekeepers' guide

**Price: \$20** 

#### BeeCabulary Essentials

All the special terminology about bees and beekeeping

**Price: \$30** 

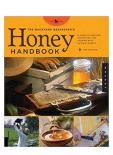


## Honey From the Earth

Internationally
acclaimed honeybee
photographer Eric
Tourneret spent
FIFTEEN YEARS
traveling the world to
capture the
breathtaking diversity
of bees and
beekeeping traditions

on six continents.

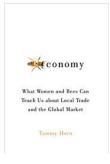
Price: \$50



#### Backyard Beekeeper's Honey Handbook

More than just a cookbook, it introduces the literal cornucopia of honey varieties available

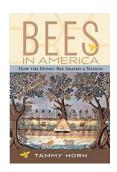
**Price: \$20** 



#### Beeconomy: What Women & Bees Can Teach Us about Local Trade & the Global Market

Examines the fascinating evolution of the relationship between women & bees around the world

Price: \$20



#### Bees in America: How the Honeybee Shaped a Nation

Cultural history of bees and beekeeping in the United States, from the colonial period, when colonists first introduced bees to the present

**Price: \$20** 



#### **Better Beekeeping**

Takes beekeepers past the beginning stages and offers solutions and rewards for keeping bees a better way.

**Price: \$20** 

All Books are only available to members at our monthly meetings

## What is clawing at my Hives John A. Gaut Master Beekeeper, EAS

In March I noticed some of the insulation on the outside of the hives had been scratched (clawed) and was out of place.





Damage to the insulation

I was not sure what animal was disturbing the hives. I found a few prints in the snow. They looked too big for a skunk. As the snow melts, prints often grow in size. Maybe.



Prints in the Snow

When the snow had melted, I did find some scat with bees in it. The scat looked too big for a skunk though. And besides, I thought skunks just chewed the bees and spit out the "cud." This really looked like defecation from a larger animal and not a ball of chewed up bees like I have seen before.



Looks like scat with bees!

#### Time to set up a game camera!

At first, I thought the camera was acting as a deterrent because I did not see any more evidence of clawing or disturbance for a few days. But when I looked through the pictures, I saw the culprit! It was a skunk. I'm not sure how he is getting past the low wire on the electric fence. That will be the next investigation!



That's a skunk!





Our Facebook Group has **over 1810 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.

Remember: <a href="http://www.nnjbees.org">http://www.nnjbees.org</a> is your website! Check it for everything Northeast New Jersey Beekeeping!

## **Next Month**

**Hive Inspections/Summer Management** 





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