



[nnjbees.org](http://nnjbees.org)

# March 2017



**NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION OF NEW JERSEY**  
A division of New Jersey Beekeepers Association

President	Frank Mortimer	201-417-7309	3 <sup>rd</sup> V. Pres.	Karl Schoenknecht	201-891-0947
V. President	Rich Schluger	201-693-6949	Secretary	Jaimie Winters	551-486-7479
2 <sup>nd</sup> V. Pres.	John Gaut – <b>Mentor Coordinator</b>	201-961-2330	Treasurer	Bob Jenkins	201-218-6537

Meeting on: **Friday, March 17th 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, March 17th** when we present our friend Landi Simone of the Essex County Beekeepers. Landi will speak on going beyond honey sales and will discuss making honey products to sell or give as gifts. From creams to honey spreads to bees wax candle, Landi has been turning her honey into the area's best organic honey products for years. John Gaut will also be discussing the mentoring program and **Bob will be taking nuc orders for April delivery.**

## **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:

Hello Northeast NJ Beekeepers!

A happy winter-spring to one and all! Well, if this weather is driving us humans crazy, I can only imagine what the bees are thinking! Last month, we had temperatures in the 70s, and now, we're looking at a foot or more of snow on the ground. March is notorious as being tough on bees, and this one may be one of the worst. The concern is that as colonies are ramping up for spring, there may have been too much brood for some colonies to adequately keep warm. (Remember, brood has to be kept between 92 f and 97 f for normal brood development.) Once spring weather is here again, and hopefully the next time it will be for keeps, take a good look at your colonies to make sure they are OK. March is also tough on bees because that's when many colonies run out of food and starve to death. So remember even though spring is just weeks away, you still need to make sure your bees have enough food. (and until the weather is officially warm, you need to feed solid food, and no liquid/syrup.)

When I last checked on my bees, I was amazed a how many bees were in my four surviving colonies. I do believe ApiVar is doing wonders for my hives, and their strength at this time of year is proof that they are doing well, and are much stronger than before I started using. ApiVar. What's interesting about the one colony that died is that it was that it was the only one with different genetics than my other four. Last summer, during the amazing nectar flow that we had, and the unbelievable amount of honey I harvested, this was the one hive that didn't produce very much honey for me. Going into winter, it was really heavy with honey, and had a similar number of bees as my other hives. My mite counts were also equal across my hives, (essentially nonexistent,) so that leads me to believe this was all about queen failure. I think the important take away lesson is that genetics do matter, so it's good to see what queens are doing well in your apiary and also across the club. It's also important to remember that there will always be differences between individual queens, so what didn't work for me might be going gangbusters for someone else. I also think it's important to try new queens from different sources, if for no other reason but as a point of comparison. Most important, I do think the more local queens we could start producing, genetics from successful survivor stock, the stronger all of our colonies will become.

Beekeepers in our area have some unique challenges that beekeepers in most of the US don't face. Where we live, and where our bees fly, is one of the most densely populated areas in the US. So, if worker bees travel up to 4-5 miles (with an average of 2 miles,) to forage, and virgin queens will fly up to 9 miles to mate, then it's safe to say that your and my bee colonies are impacting everyone else's bees. So that means how you care for your bees will have a direct impact on the health of everyone else's bees in the club. This is especially true for mites. If we call treat for mites, then we can keep the mite population under control. However, if a beekeeper or should I say a bee-haver is negligent about controlling mites, that person is allowing their hive to turn into a mite bomb that will kill not only his or her bees, but also that of all the other hives within a 5 miles radius. I do think it's important to point out the impact we are having on one another, as it adds to the responsibility of keeping bees in Northeast NJ. Also, when you realize that queens will fly up to 9 miles to find a drone congregation area that is away from her nest, (and away from the genetics of drones she is related to,) then the area of impact each of our hives makes increases. Remember, mites prefer drone larvae, so less mites = stronger drones. Stronger drones = better mating genetics for queens. Better mated queens = stronger hives. Stronger hives = more honey AND more higher winter survival rates. Everything you do in your hive impacts everything else.

I am looking forward to this Friday's meeting. We have the honor of having Landi Simone, one of NJ's most knowledgeable beekeepers as this month's speaker. Landi is a wealth of information, as she is an integral part of EAS's Master Beekeeping Program. Landi has also been a huge part of the New Jersey State Beekeeping association, and has been helping beekeepers for years. Landi last spoke to our club in 2011. At that time we had less than 45 members, and if more than 25 showed up for a meeting we thought it was a success! Let's all make it a point to be at Friday's meeting, and show Landi how much our club, The Northeast NJ Beekeepers, has grown!

See you Friday!

Sincerely,

**Frank Mortimer**  
**President, Northeast NJ Beekeepers**



# Galápagos Islands and Queen Breeding

John A. Gaut

My wife and I spent a magnificent week in the Galápagos Archipelago earlier this month. Darwin began formulating his Theory of Evolution in the Galápagos. Evolution is driven by natural selection. A species is not static; they are continuously adapting to new environments (or going extinct). The changes are encoded in the genetics of the species.

As I was learning more about Natural Selection, I thought about Honey Bees and how they are under tremendous environmental pressure from the Varroa mite. Our honey bees did not evolve with the mite and have little resistance. A similar situation has occurred with the Galapagos finches. An accidentally introduced ectoparasite feeds on the young chicks and is wiping out the species. The scientists are working on various strategies to prevent the demise of the birds. While human intervention usually is not part of the protocol in the Galapagos ecosystem, the scientists know they must intervene to prevent the extinction of the species.

Tom Seely has found some honey bee colonies in the Arnot Forest are adapting to the mite. These colonies are much different than our typical colonies (they are much smaller), do not produce excess honey and are much more widely distributed in the forest. Natural Selection has not been successful for managed colonies though. Untreated hives continuously die and any good genetics are lost.

While Natural Selection does not seem to be the near-term answer for our managed hives, some assistance from the beekeeper will be beneficial. I have been raising queens for a few years now and the breeder mother queens and drones are selected. This is artificial selection instead of Natural Selection. If I would just let nature take its course, I may end up with good bees or not so good bees. Natural selection is random, you don't automatically get desirable characteristics.

I select my breeder/mother queens based on:

- Varroa Sensitive Hygienic Behavior
- Winter Survival
- Gentleness
- Freedom of disease
- Honey Production

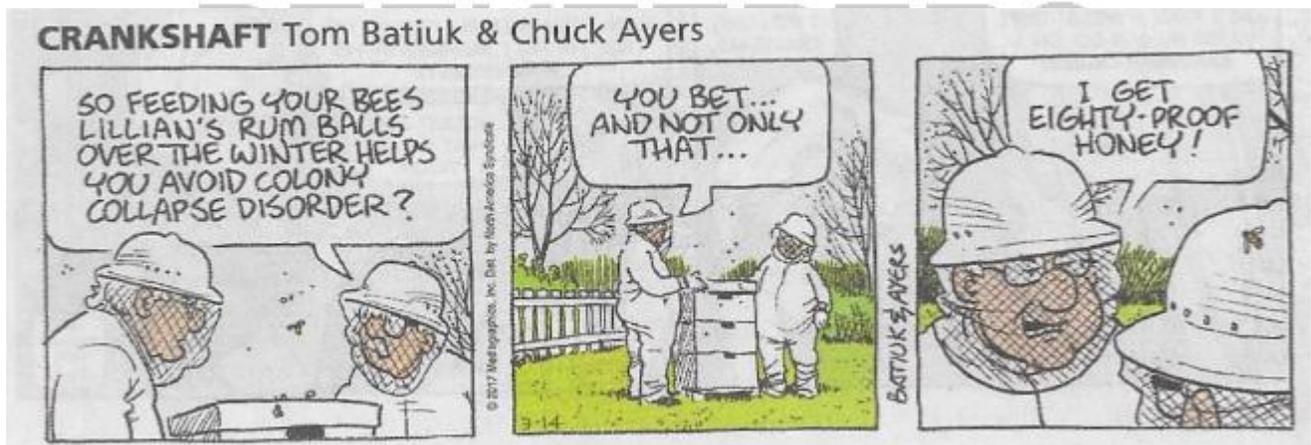
Queens are only part of the breeding program. Drones are the other important part. I select drones based on:

- Gentleness
- Freedom from Disease
- Also Gentleness
- Hygienic Behavior
- Last but not least, Gentleness

Diversity is also important for the colonies survival and productivity. While I select the colonies that will produce the drones for the queen to potentially mate with, I cannot control who the queens mate with. Hopefully the queens mate with some (maybe most) of the selected drones. They will also mate with other drones around the area, adding diversity. Generally the colony has good genetics (productive, hygienic, low mites, and gentle), but sometimes not and the Queen is replaced.

The issue of diversity can be a problem in closed mating systems. In closed systems, the Queen is instrumentally inseminated or there are isolated areas for open mating. An example of a closed system with open mating is Buckfast queens or Russian queens. These queens are mated with only selected drone colonies in these isolated areas. These systems may not have enough diversity. There is a "genetic bottleneck" in the Galápagos plants and animals. Only a few individuals populated the islands initially and their genetics are all there is for subsequent generations (unless a mutation occurs). While a lot of the plants and animals survived, there were others that did not. Certainly the environment is harsh. Diversity in the genetics may have helped the survival of these species that are now extinct on the Galápagos Islands.

While we still need to treat our bees, I have been working toward incorporating genetics in my colonies that tolerate mites while being gentle and producing nice honey crops under various seasonal conditions. Realistically I will need to continuously monitor mite levels and be ready to treat when necessary. While the colony may be able to manage their mite levels, I observed they can be overwhelmed in a few days by a neighboring collapsing hive that has not been managed effectively.





Northeast New Jersey Beekeeper...

Public Group

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...



**1,667 Strong!!!**

We quickly blew through the 1,600 member milestone and are, as of this writing **1,667** members strong, and growing on our Facebook page! Be sure check it out. See the great pics and stories posted by the Facebook fans from all over the world!

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

❖ **Volunteers** ❖

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

**Next Month**

The Northeast NJ Beekeepers continues our BeeTalk Series where the focus is on your questions. The subject will be Installing/Caring for your new nucs & Swarm Management.