



nnjbees.org

October 2018



NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION OF NEW JERSEY

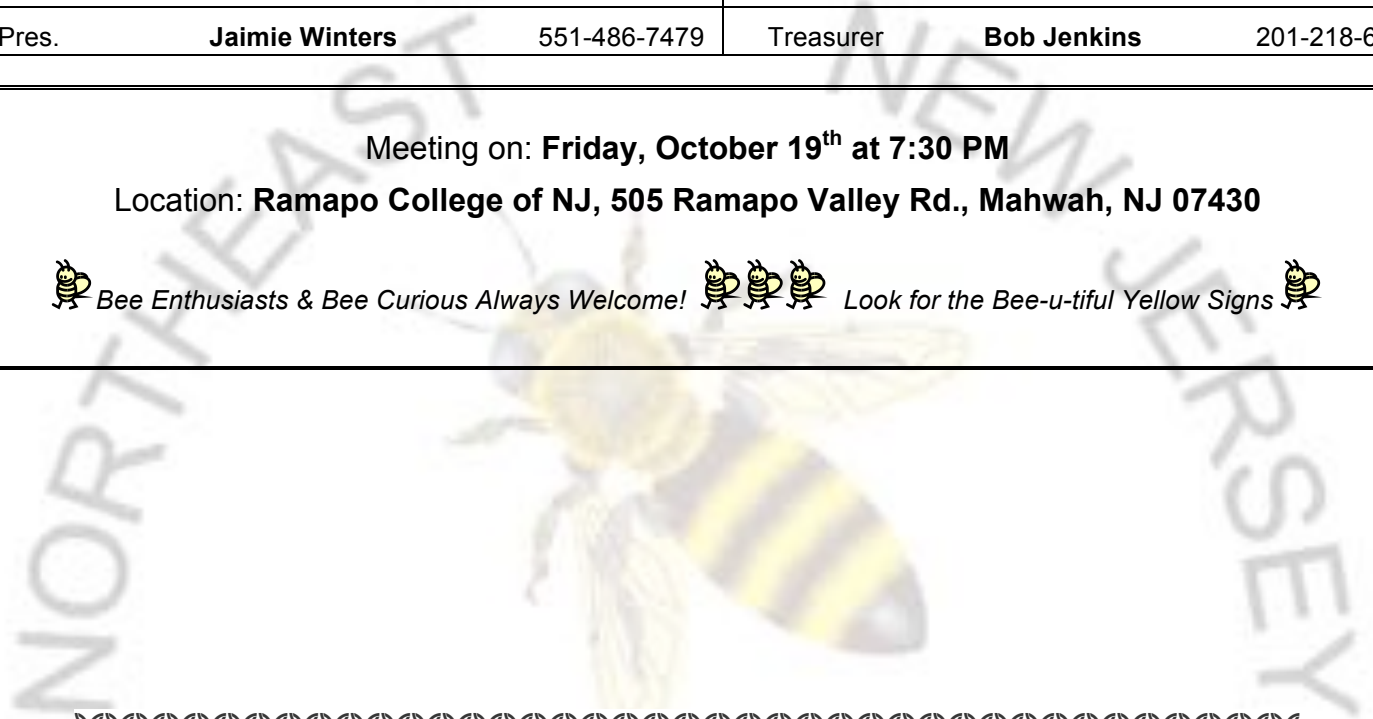
A division of New Jersey Beekeepers Association

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2 nd V. Pres.	Jaimie Winters	551-486-7479	Treasurer	Bob Jenkins	201-218-6537

Meeting on: **Friday, October 19th at 7:30 PM**

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

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



BEEKEEPERS





Message from the President:

Happy Fall Northeast NJ Beekeepers!

This Friday, October 19th, we have **Dr. Jamie Ellis** from the University of Florida as our guest speaker. Many of you may know him from his articles in *American Bee Journal*. I am really looking forward to his talk and we are honored to have him as our guest. Dr. Ellis is sure to make this Friday's meeting one of the best in our club's history, and I do hope you make an extra effort to attend. Please note that Friday's meeting will be in the same room as our Honey Cup, **Friend's Hall in the Student Center**.

This month will be filled with many to-dos to get your hives ready for winter. Everyone should be treating for mites, and feeding any hive that doesn't have at least 60 pounds of food stores for winter. Soon, it will be too cold for syrup, so for your hives that need it, feed, feed, feed.

Over the past few weeks, I have been hearing a lot about wax moths, and I fear this year may be a very bad year for wax moth infestations. Please make sure you are checking your hives and properly storing all your extra frames of drawn comb. Losing any frames to wax moths is always such a loss, and such a disgusting mess to clean up. Please remember to freeze or store your frames with Paramoth to prevent any damage to your equipment.

As the weather gets colder, please remember two words: Mouse guards. It's time to get them on and prevent your hives from turning into a mouse Airbnb. In all of my hives I like to use a screened bottom board that sit on top of wooden hive stands. Below the hive stand, I keep a plastic tray that looks like it's from a school cafeteria. The trays are available from [Betterbee](#). I access the trays from the back of the hive stand, as they sit under the hive. I like using these trays, as they provide clues as to what's happening inside my hives. For example, if I see a lot of pollen on the tray, I know they bees are raising larvae. If I see a lot of wax cappings, I know a lot of bees are hatching out. I also find it useful to compare the trays from all of my hives and look for any outliers. If all but one hive has a lot of pollen on it, then I know when I do my hive inspection, I need to confirm that I see signs of the queen. The trays can never replace a thorough hive inspection, but they are good for forming a plan on what I need to be looking for when I go into my hives. Last week, as I was inspecting my hives, I was first going down the line of hives checking all the trays. One hive at a time, I reach into each of the opening at the back of the hive stand, pull out the tray to get a sense of what's happening in the hives. On this particular day, as I reached under my third hive and was pulling out the tray, the biggest, furriest mouse I had ever seen ran out from under the hive stand, used the plastic tray I was holding as a diving board, and did a triple Lindy dive into the grass and scurried away. Once I stopped screaming like a preschooler, I took a deep breath and said to myself, mouse guards. It's time for mouse guards. Now I say to you, get your mouse guards on before Mickey's chubby cousin comes flying out of your hive.

Next month, **Dr. Tammy Horn Potter**, Kentucky State Apiarist and author of *Bees in America: How the Honey Bee Shaped a Nation* and *Beeconomy: What Women and Bees Can Teach Us about Local Trade and the Global Market* will be our guest speaker. The date of her talk is **Friday, November 16th**. The club will be selling her books, and Dr. Potter will be signing them following her talk. Please note, for her talk we will be meeting in **the Pavilion**.

I look forward to seeing everyone on Friday!

Resenting those meeces to pieces,

Frank Mortimer
President, Northeast NJ Beekeepers

Beekeeping in the Fall

by John A. Gaut
EAS Master Beekeeper

Fall has arrived and winter is right around the corner! Pollen is still coming into the hives. I'm amazed the bees can find any pollen at all this time of year. I started to open feeding a dry pollen substitute. On warm days the bees gather the open fed pollen substitute and store it in the hive. Pollen patties placed in the hive are only consumed, not stored. I winter in two deeps. I like to see a lot of pollen stored in the hive, usually on the outer frames in the bottom box. Open feeding pollen substitute helps fill a few frames with protein for the winter. The top box is usually nearly full of honey.



The colony should have pollen stored on at least 4 frame sides (at least 2 frames total). I would count this as $\frac{1}{4}$ frame, half of one side of a frame. The colony will consume the pollen in the late winter and early spring as brood rearing ramps up. (This was a brood frame the colony is now backfilling with honey and pollen.)



Two types of open pollen/protein feeders I use. The barrel is in apiaries with 10+ colonies. The container with holes cut in the sides are in smaller yards. The container with the lid does keep the protein feed dry.

By early November, the colonies are making the final preparations for the winter. Brood rearing has ramped down and the honey and pollen have been stored for their winter survival and the spring buildup. Each colony should have at least 60 pounds of honey and several frames of pollen. (If a colony does not have enough honey and pollen, the beekeeper should plan to supplement carbohydrates and/or protein in the late winter so the colony can build for the spring.) The winter bees have emerged and are “fattening up.” The winter bees store vitellogenin (protein plus some fats) in their head and abdomen. The vitellogenin in the winter bees is used to produce food (jelly) for the young brood in the early spring. Pollen (protein) must be available in the hive so the winter bees can continuously replenish their vitellogenin stores as they feed brood in the early Spring. The bees that heat the hive using the muscles in their thorax also need pollen (protein) to rejuvenate their muscles in the cold winter.

Most importantly the mite levels should be low (less than 1% is ideal). The winter bees were raised in September and October. Mite levels needed to be low so the winter bees are healthy. A colony can have plenty of bees, honey and pollen but still die over the winter due to mite parasitism. The viruses (and bacteria) the mites transmit will weaken the winter bees and they will not be able to maintain cluster temperatures or raise brood in the late winter. Final mite checks (using the alcohol wash method) should be performed now to verify your Mite

Management procedures were effective. (I'll share my Mite Management Plan again in an upcoming newsletter.)

If I depend on my memory, I risk forgetting or neglecting some tasks. So I use checklists. Below is the checklist I developed insuring the colonies are ready for winter.

Checklist for Winter Survival

- Remove Feeders and any extra supers
- Adequate Honey Stores
- Good pollen reserves
- Large population of young healthy bees
- Low Mite levels
- Upper entrance
- Reduced bottom entrance with mouse guard
- Minimize Air Infiltration
- Close Bottom Board on Screened Bottoms
- Insulate the top of the hive between the inner cover and the outer cover
- Insulate the hive sides

I insulate both the top and sides of my hives. The top insulation (between the inner cover and top cover) helps retain heat from the cluster and prevents condensation on the underside of the inner cover. The warm moist air escapes out the small upper entrance instead of condensing on the inner cover. Only a small notch is needed in the top of the hive; too much air flow will cause the colony to consume more honey to stay warm. The colony is very good at moving more air if needed for temperature or humidity control. The side insulation also helps retain heat, reduces air infiltration and allows the cluster and brood nest to expand more in the early spring, without the risk of chilled brood. I suggest at least insulating the top if the hive. Many beekeepers see improved survivability with insulation on both the top and sides.

Fall and Winter is a great time to learn more about honey bees and beekeeping. An excellent opportunity will be at the State meeting on Saturday, November 10th. Dr. Debbie Delany of

the University of Delaware will be one of the speakers. The American Beekeeping Federation Conference will be in Myrtle Beach in early January. This is another excellent opportunity to learn from beekeepers and researchers from North America. For more information about the ABF Conference, go to <http://abfconference.com/> Our own NJ Honey Queen will be competing for the National Honey Queen or Princess Title. And sitting down with a beekeeping book on the cold snowy days is always good.



A picture from last winter. These five hives in Franklin Lakes survived the winter in good shape and produced a huge honey crop this past season. The hives are wrapped with “BeeCozys”.



Bad Assumptions

by John A. Gaut
EAS Master Beekeeper

A couple bad assumptions lead to this!



I helped a relatively new beekeeper do mite checks in early October. As soon as I looked at the first few frames in one hive, I knew the mite level was going to be high. We saw bees with deformed wings and uncapped pupa. We also saw some dead larva (due to bacterial and virus infections from the mites). The dead larva looked like they melted in the cells. I pulled a couple pupa out and sure enough there were mites on the pupa. Some of the mature pupa were too weak to chew their way out of their cells. The second hive was similar. The first hive had 75 mites per 300 bees or 25%! The second hive had 52 mites per 300 bees or 17%. We treated with ApiVar. (I wished I had some MAQS to use as a first quick treatment followed by ApiVar.)

What were the bad assumptions?

“They were nucs so I did not think they would need to be treated until after the honey supers were off. “

“I was going to treat anyway so I did not think I needed to test.”

Beekeepers that check their mite levels monthly know when they need to treat and verify the treatment was effective. They also learn much more about the seasonal mite population dynamics in their location, helping them make better decisions. Both beekeeping and mite management are LOCAL.

Winter survival of these colonies will be very difficult due to the virus infections. These were strong nucs that built into large colonies and produced some honey.

Another bad assumption some other new beekeepers make is, “I do not see mites so they assume the bees are OK.” Another beekeeper shared a little more insight why new beekeepers may make this bad assumption. When mites are discussed, there is often a picture of a bee with a mite on top of its thorax. So, they look for mites on the top of the thorax or abdomen of the bees.

Actually, visually finding mites on bees is very difficult. The mites have a body shape that enables them to tuck under the abdominal segments. The mites prefer to be on the underside of the bee to feed. The colony can have high mite levels and the beekeeper will not see mites on the bees. Only an Alcohol Wash gives us a true indication of the how many mites are on the bees by dislodging the mites dug into the abdominal segments. Once you actually see some mites on bees, the mite level is typically very high.

Beekeeping comes with responsibilities. A colony of bees is very dependent on their beekeeper to survive. The more knowledgeable a beekeeper (including knowing the mite levels), the more likely this amazing superorganism can survive and thrive!

**Ramapo College Beekeeping Club,
Northeast NJ Beekeepers & Essex County Beekeepers**

**Proudly Present:
Jamie Ellis, Ph.D.**

**Gahan Endowed Professor of Entomology
Department of Entomology and Nematology
University of Florida**

OCTOBER 19TH 7:30 PM

Ramapo College, Friends Hall, Student Center



Please join Dr. Ellis as he brings to life the exciting and fact-filled world of Honey Bee Natural History, Biodiversity, Conservation, and Ecology.

For more information, please email: northeastnjbeekeepers@gmail.com

20 Signs You're Living With A Beekeeper

by

Sofie Mortimer

1. You know more facts about honeybees and beekeeping than you care to admit, mostly from listening to your spouse talking about every single hive, every time, all the time.
 2. You can no longer bite your tongue when people see a yellow jacket and start screaming "BEE!!!" as you feel compelled to politely point out that in fact it's not a bee.
 3. When the vast majority of all house warming, baby, and thank you gifts are bee themed.
 4. When a big, heavy box gets delivered to your door, you automatically know it's bee equipment.
 5. You find dead bees in with the dryer lint on a weekly basis and eventually you don't even think much about it.
 6. You start washing "bee clothes" separately from everything else; otherwise the whole family would smell like campfire - even though no one has gone camping.
 7. Bottling honey and putting labels on the jars becomes a regular family activity, where every family member has a specific job and is required to help.
 8. You always scan the car for any bees buzzing around in the back before getting in. And sometimes, you text your friends to say you're going to be late, because you know you're going to have to get all the ride-along bees out of your vehicle before strapping the kids in.
 9. Your kid matter-of-factly announces that there's a bee in the car; you keep on driving like it's no big deal, and no one gives it a second thought.
 10. You own honeybee Halloween costumes in multiple sizes.
 11. Having queen cages filled with live bees on your dining room table is no longer strange.
 12. Your garage, and every other storage area in your house, is full of beekeeping equipment, or buckets and bottles of honey.
 13. When your kids see a bee, they run to it, not away from it.
 14. You plan your vacations around the nectar flow.
 15. When your measuring cups and spoons disappear from the kitchen and end up in the garage to be used for mite washes, Honey-B-Healthy, and Paramoth.
 16. Your kids insist on reading any picture book they find that has a bee on it.
 17. You spend so many weekends at fairs talking about bees and beekeeping you realize that you can answer most people's bee related questions, enabling your bee-obsessed spouse to get an occasional bathroom break.
 18. Your kids put honey on everything they eat including toast, bacon, pasta, and hot dogs.
 19. You clean honey off the floor more often than most people cut their grass.
 20. You have to explain to your parents that dinner plans can wait, because catching a swarm cannot.
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Beekeeping Memories

Prepping my Bees for winter

By

Karl Schoenknecht

My two hives did well in spite of continuing rain, high humidity and long periods of high temperatures. With a busy retirement schedule with our seniors club and our Community Emergency Response Team, I find that cleaning and repairing my old hive equipment relaxing. I needed to make changes but I still had honey supers on both hives so I waited to see if the bees would cap the honey by the end of August. As September came I added spacer boxes and inner covers to get the bees to move the still uncapped honey down into the brood boxes. The bees did not cooperate so I added a bee escape to each honey super to remove the bees and then removed the honey supers a day later.

I started treating both hives with ApiVar on September 11th hoping to put the honey supers back on after the treatment was finished. A week later I saw the first signs of wax moth damage and determined that I needed to place the supers near the hive so the bees would clean out the honey. I eventually placed the supers on top of the hive with space for the bees to enter. **(Picture one)** It took more than an hour for the bees to find the exposed honey supers during the cloudy, rainy day. Most of the bees walked up the front of each hive to the box above and I did not see bees steal honey from the box on the adjacent hive. The second day was sunny and the bees worked all day to remove the honey. By the end of the third day the activity stopped and each hive's honey super was about 20 lbs. lighter.

I removed the empty honey supers and put them in storage after adding moth crystals. With both hives reduced to two brood boxes, I was able to add insulation to the inside of each outer cover. The inner cover has a half circle hole to allow the hive to stay ventilated and the top cover insulation will reduce condensation during the cold weather. I still need to check for food supplies and mite count but that will not be necessary until my ApiVar treatment-period ends in several more weeks. Of course I must first add cargo straps to the hives as a form of bear protection.

I only lost a hive once to a bear but adding an electric fence is expensive for one or two hives. **(Picture two)** The cargo straps saved my hives on two other occasions but are a nuisance to

use. I needed to raise one hive to allow space under the bottom board for the straps but a couple of boards did the trick. I found two sheets of aluminum to cover and protect the buckles and also act as a rain shield above the entrance. I took a picture just before 9 PM and the bees are still guarding each entrance but most of the bees are needed inside to keep the brood warm. **(Picture three)** Now I need to clean old frames and fix or assemble equipment for next year.





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Our Facebook Group has **over 1822 fans** from all over the world! It's a great place to connect to other beekeepers, so be sure check out all the great bee pics, bee stories, and bee info.

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
Mike Miller	Club apparel
Bob Slanzi	Meadmaster

NEXT MONTH

Tammy Horn Potter, Ph.D.
Author & Kentucky State Apiarist

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

