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October 2016

NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION OF NEW JERSEY

A division of New Jersey Beekeepers Association

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

Meeting on: **Friday, October 21st 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, October 21st** when we present our special guest, Bob Slanzi, the Northeast NJ Beekeepers Associations Meadmaster, EAS speaker, and national award winning mead maker, will be talking about how you can turn your honey into mead. Bob is a nationally recognized mead maker and has won multiple competitions, including Best in Show at NYC largest Home Brewers contest beating out over 750 entries. Bob will be offering samples of some of his award-winning brews, so come and learn how to put your extra honey to work to make the oldest kind of wine. Please click on the link to read more about Mead in New Jersey. Bring your friends, family, neighbors as attending is free for all. See you all there!

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!

Well, it's October, which usually means cooler weather is upon us, but this week, I'm not so sure. Regardless, it's still important to make sure your hives are ready for winter. Remember, each hive needs about 80 pounds of honey to make it until April. BUT, it's also extremely important to remember that you cannot feed syrup when the temperatures drop. Moisture kills bees and having syrup on the hive when it's freezing outside will devastate a hive. This unseasonably warm/hot weather may cause issues for some hives later in the winter. When it's cold, the bees cluster and use less energy, and with it so hot, and with no nectar sources available, the bees will consume their honey faster than they would if we were experiencing cool fall weather. My advice is to plan on checking your hives starting in December to make sure they have plenty of food to make it until spring. If you are a new bee, please remember that in the winter, we feed our bees fondant or bee candy, a solid sugar instead of liquid. Personally, I prefer fondant, mostly because I'm a glutton for punishment, and working with a 50 pound box of fondant is like wrestling with an ultra-sticky, 8-legged sea monster.

It is also important to make sure you remove the ApiVar strips from your hives. Leaving the strips in all winter, when the dose is too low to kill mites, could cause the mites to build up a resistance to ApiVar, which would mean that we are back to the drawing board on how to fight the mites.

Last, it is also important to remember to install mouse guards on your hives. Entrance reducers are not enough, as they are not small enough to keep critters out of your hive. If you google pictures of how much damage a mouse can do to your frames and wax, you'll see why mouse guards are a must. When you stop to think about it, it's easy to understand why mice do like to winter in a hive. They benefit from the warmth the bees are producing, they have a cupboard stocked with food, and as long as they are out by spring, the bees stay in their cluster and don't attack the mice. My personal favorite mouse guard is from Mann Lake. It is a solid piece of metal with holes drilled out. Also, you screw it onto your hives, so you never have to worry about anything moving it out of place.

The last winter precaution I like to take is strapping my hives down. I use heavy-duty ratchet straps, as they lock and stay tight. I loop the strap through the cinder blocks underneath the hive to provide added support. Having my hives strapped means I don't have to worry about the tops blowing off, and even if something or someone knocks the hive over, I know everything will stay in place and the hive will still be ok.

The remaining meetings for this year are all going to be special. This Friday, we have our own Bob Slanzi, talking to us about his award-winning secrets to making mead. In November, we have Tom Seeley as our very special guest speaker, and in December, our traditional holiday party.

I hope to see you this Friday, as well as the Monty meetings to follow. May the bees be with you.

Frank Mortimer
President, Northeast NJ Beekeepers

Franks favorite mouse guard from Mann Lake.

To Treat or Not to Treat

The below letter is about a lesson learned by one our new members. Bobs mentor is Jaimie Winters and the interaction described below is the exact reason we exist as a club. If we can do this one thing well then that completely justifies our existence. All the rest of our programs, guest speakers, BeeTalks, group purchases, books, apparel sales, and many other benefits are icing on the cake! -Thanks for the great write-up Bob!

Treat or not to treat that was my question. Well, there is no question you must test and then treat when needed.

This week I finally decided to treat with Apivar and not the Mite Away strips and after 3 days I'm shocked at the amount of dead mites on my bottom board. While I was reluctant to treat based on what I thought I was seeing which was very healthy bees in large numbers I couldn't have been more wrong. I had both products on hand with intentions of using them if needed but I'm a perfect case of the first year beekeeper who knows just enough to get in trouble! I can see now that I was the perfect storm….. Read all the books, watched all the webinars, have booming hives, frames covered in beautiful healthy looking bees, can't find mites on IPM boards. I didn't have any of the typical problems one might expect to see. No dead bees, no deformed wings. My gals were the picture of health (but I neglected to test for mites). I simply didn't want to subject the bees to Mite Away for several reasons (unable to feed during treatment, possible loss of the queen at this time of the year, lots of stress on the bees and the possibility of killing beneficial mites and Microbes that also exist in the hive).

Clearly I was dead wrong and had it not been for my relentless mentor I probably would have lost both of my hives during the winter while my strong colonies could have spread the mites to weaker colonies around town.

LISTEN TO YOUR MENTOR….. Test and then treat when appropriate.

Thanks to our club for all the support.

Bob V.

Beekeeping in October

John A. Gaut

The bees have been working some remaining golden rod and the aster has been in full bloom in my area. But it has been dry so there is not much nectar. Most hive weights have been slowly increasing; I have had to add some sugar syrup to help. The colonies are organizing the hive for the winter, storing honey and pollen. (I continue to be amazed how consistently a colony arranges the honey to the top and outside, pollen in the bottom near the center and a brood nest in the center bottom part of the hive.) The field force will continue to bring in any pollen they can find. Once we have a hard frost, foraging for will stop. There will always be scout bees looking for any nectar or pollen sources and orientation and cleansing flights will still occur on warm days. The colonies will reduce brood rearing as the days get shorter and cooler. The "winter bees" are emerging; winter survival will depend on their health and numbers.

To survive the winter, **the colonies should be strong and have a vigorous queen**. Three other important considerations are:

1. **Adequate food reserves, both honey and pollen**. The hive should have 60 pounds of honey and at least the equivalent to 4 frames of pollen (bee bread). The colony will consume the honey to maintain a cluster temperature and also need the protein from the pollen to stay well nourished. In the middle of winter, the colony will start consuming both honey and pollen when they start brood rearing.
2. **Low mite parasitism**; less than 1% is ideal. Mites suck the bee's hemolymph (blood) and transmit viruses causing the colony to suffer a virus epidemic in the middle of winter. One last mite count now (after any treatment is removed) will let you know if your mite treatment program was successful. Treatments vary in effectiveness. You can NOT assume that your colonies are OK since you treated; you need to test and verify the treatment was successful!
3. **A dry and wind protected hive.** A small top entrance helps to ventilate moisture from the hive and provides an alternate entrance if the bottom entrance is covered in snow. A piece of insulation between the inner cover and outer cover can prevent condensation on the underside of the inner cover (condensation raining on the cluster can kill the colony). If a screened bottom board is used, the IPM board should be in place. Too much air moving through the hive will cause the colony to consume more honey to maintain the cluster temperature. Insulating the sides of the hive also helps reduce air infiltration and can reduce heat loss, especially on those windy, sub-zero February nights.

Most of the colonies I have inspected during September and early October are doing well. There are many variables; the most important is **mite counts**. If the mite counts are low, the colonies are able to adjust to most of the other variables and pressures. I have found some colonies that have high mite counts though!!! These are typically the stronger colonies and mites were under control a month ago. They look very healthy now but the alcohol wash shows they will suffer if I do not treat for the mites. Why did the mite levels jump up so quickly? Research is showing other colonies collapsing under heavy mite loads are the reason. Untreated colonies are the "nuclear bomb" of beekeeping. A strong colony robs out the collapsing colony, bringing back mites to the strong colony. Also the bees in the collapsing colony will abscond and enter other hives in the area. The mite "fallout" from the nuclear bomb colony can easily spread for 2 or more miles. I'll

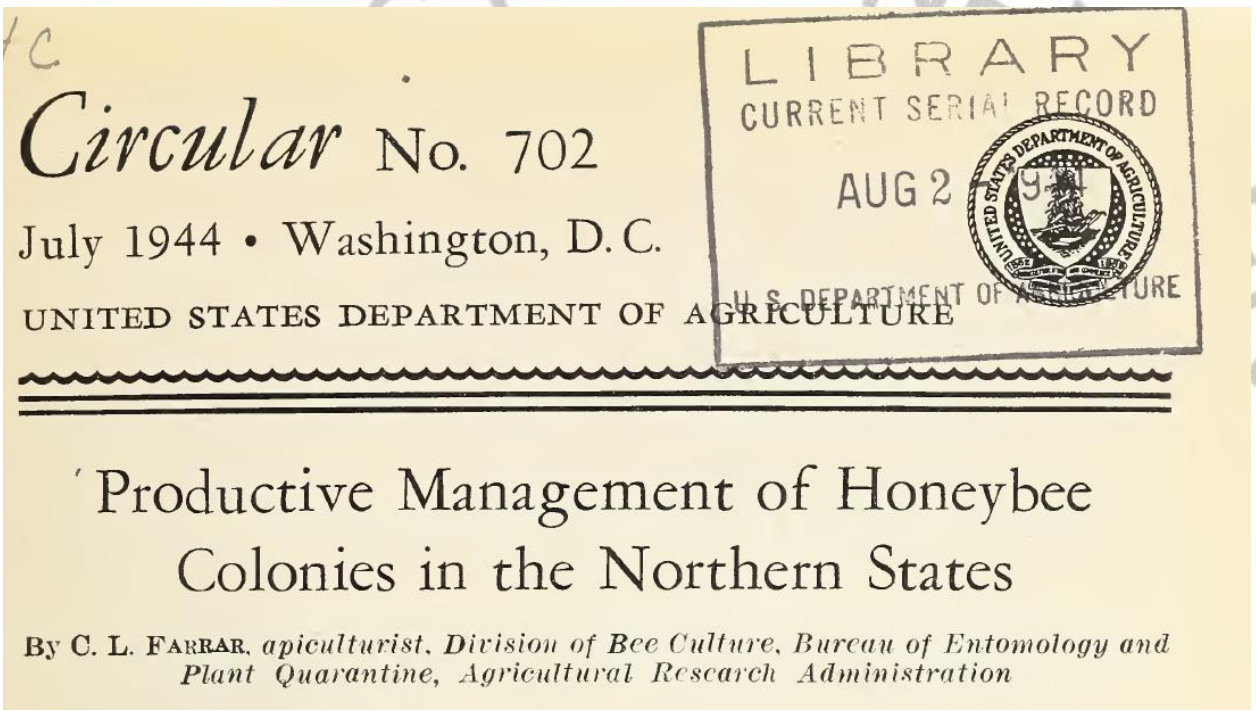
reapply ApiVar to the colonies that have more than 1% mite levels. Check your colonies for mites and treat if necessary. **Please don't create a nuclear bomb for you and the other beekeepers!**

The Winter Cluster and Hive Organization

John A. Gaut

I am currently inspecting my hives before the really cold weather sets in. I continue to be amazed at how consistently each colony organizes the pollen and honey for their winter survival. Randy Oliver recently wrote about the population dynamics during winter and referred to a Department of Agriculture Circular by Farrar from 1944. I happen to have a reprint of the circular. It is still excellent information. The circular is available online and there is a scanned copy on our Northeast Beekeepers website.

Click here for this document.



Circular No. 702

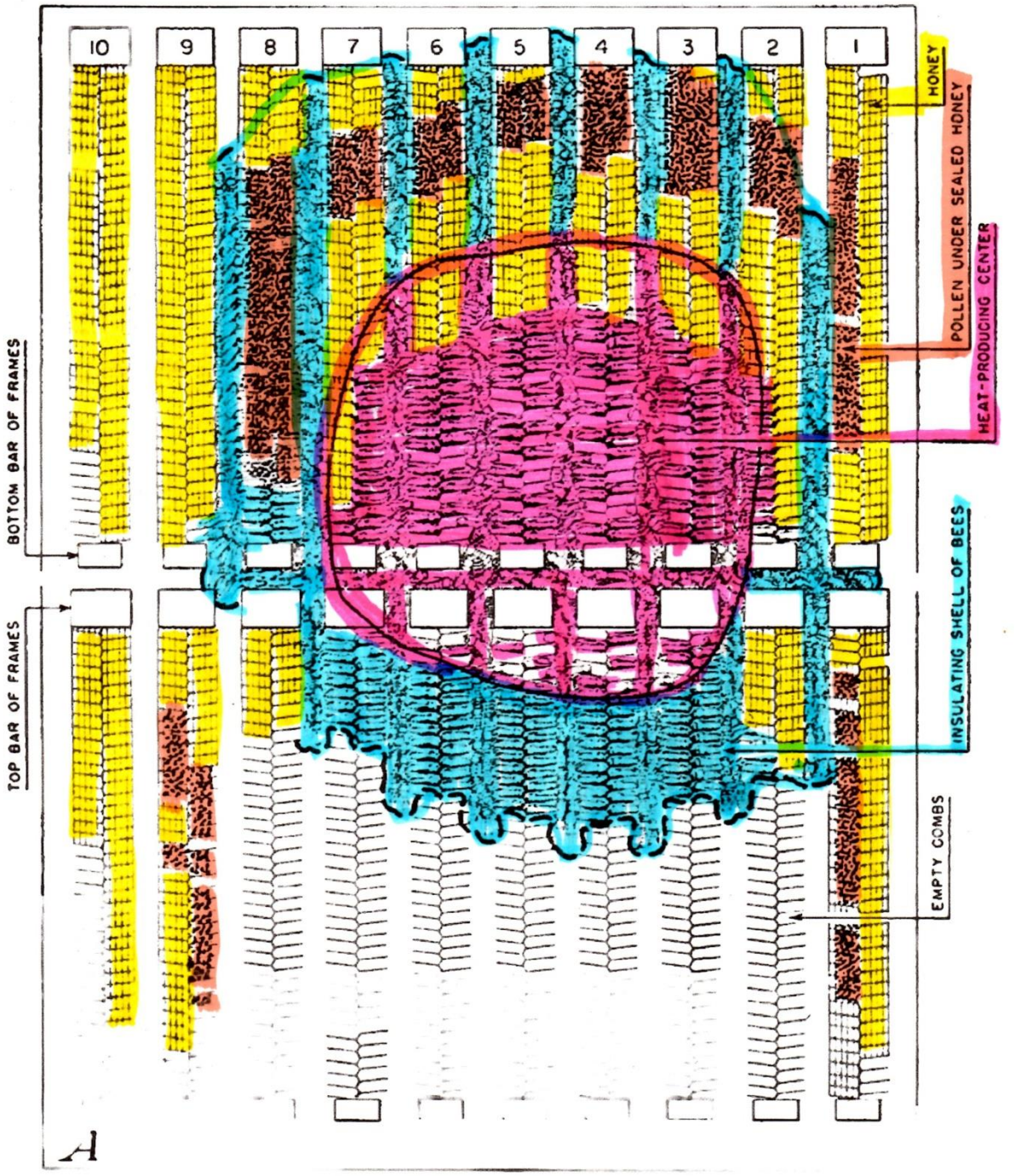
July 1944 • Washington, D. C.

UNITED STATES DEPARTMENT OF AGRICULTURE

Productive Management of Honeybee Colonies in the Northern States

By C. L. FARRAR, *apiculturist, Division of Bee Culture, Bureau of Entomology and Plant Quarantine, Agricultural Research Administration*

One section of the circular describes the "Winter Requirements" of the colony and includes a diagram of how the cluster is typically organized with the honey and pollen in mid-winter. I added color to the diagram so it is a little easier to see the organization of the bees and their resources. The diagram is below.



The honey is yellow. The pollen is orange. The cluster of bees are the blue and pink. Notice how the cluster fills the space between the frames of honey and pollen. The cluster also fills the empty cells at the bottom.

The blue part of the cluster are the insulator bees, densely packed together with their heads toward the center. The insulating shell of the cluster enable the interior of the cluster (pink) to maintain a warm brood nest temperature.

The bees move to different parts of the cluster. The bees on the outside need to move toward the center to warm up and be fed. The bees in the center are not densely clustered; there is room for the queen to move around to lay eggs and the nurse bees to feed the young. The inner cluster of bees consume the honey and pollen (at the top and sides of the inner cluster) and feed brood food to the larvae and also feed the bees in the outer cluster.

The bees at the bottom of the cluster are not in contact with any honey. They depend on the bees at the top and sides to feed them. The bottom of the cluster is the coldest area. When these bees, or any bees on the outside of the cluster get cold, they move toward the center to warm up and then are gradually moved back to the outside as other bees on the outside need to warm up and be fed. When the temperature gets colder, the cluster reduces in size. With a smaller denser cluster there is less heat loss and there the insulation layer of bees is thicker. But the size of the brood area becomes smaller too! If the bees get too cold, they can not move and fall off the cluster and freeze to death at the bottom of the hive. If there is enough food and the cluster is in contact with the food, the bees usually do not get cold enough to fall off and die. (If the hive has too much ventilation, the bees can get too cold even if there is enough food.)

In the fall, the hive should look similar to the drawing except the cluster is usually in the lower brood box. The cluster will move up as they consume the honey and pollen above them. It is not unusal to have open comb in the bottom deep. The bees do need some open comb to cluster effectively.

As you do your fall inspections, look how the colony has organized their hive. They should have the honey and pollen stored so they can move up during the cold winter and then expand out to the sides once spring arrives.

Find us on Facebook

1,595 Strong!!!

We quickly blew through the 1,500 member milestone and are, as of this writing 1,559 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 present author **Tom Seeley,** PhD. Cornell University & Author, Honeybee Democracy, The Wisdom of the Hive, Following The Wild Bees.