



October, 2020 Northern Illinois Beekeepers Association

PRESIDENT'S MESSAGE

Well as October greets us with cooler temperatures and shorter days, we meet quite a bit of work on our colonies head on. This is when what we have done in the past few months begins to show up, but our work isn't done yet. If you haven't treated for mites your colony might already be dead but right now is when the final preparations are taking place. Doing a final mite check then treating for mites if the numbers require a treatment should still be done. If you've been using different treatment types and chemicals along with trying to get a brood break in your colony should be strong and have lots of bees in October. Every presentation we as a Board have provided to NIBA members has been to get your colonies through the Winter, hopefully you've been able to work your bees using these techniques and strategies and they are alive in October.

Ralph Brindise, John Leibinger and I mite-tested the hives at MCC and the numbers were high enough to require a treatment. Ralph and I met early one morning and did an oxalic acid vapor treatment on two of the hives, the third hive had too many bees at the opening and we couldn't get the wand in without killing lots of bees. We will go back in a couple weeks to do an additional treatment. I went out with my buddy Pat, he's a retired firefighter that I got hired with for the Wheeling Fire Department and a guy that helps me out a lot. We changed out all of the batteries in the BroodMinder sensors and added feed to all of the colonies. We found a large cluster of bees on the screen under the blue hive because all of the doors on the robbing screen somehow got closed. The temperature was around 60 degrees so when we had the new batteries in the BroodMinder scale, we scooped the bees into the hive and closed it up. I'll have to drive out to check on them more often.



Chores of the

Like the bees we study, we accomplish more together. John Leibinger

Month – October

What's happening in the hive?

Hive activity will be markedly reduced this month. Winter is just around the corner and the bees know it. The "Ousting of the Drones" should be winding down. The foragers are still scouting for natural nectar and pollen sources or other sources to pillage. Beware of robbing.... from both ends of the process. If your hives are **getting robbed**, the result is obviously disastrous. If your hives are **doing the robbing**, though it may seem less obvious, the results can be equally as disastrous. The weak hive that they may be robbing could be weak as a result of varroa mite infestation. When your bees are in the weak, infested hive, the parasitic varroa will be looking for a way out so they can find a healthier host. They will hitch a ride on your bees and find their new home in your apiary. **Now you have the mite problem!** Difficult to prevent, but you can mitigate the likelihood by making sure that you are providing plenty of sugar syrup at 2 parts sugar to one part water (four pounds of sugar to each quart of water). If your bees have plenty of access to food, their need to rob other hives will be lessened (but not necessarily eliminated).

There are still some winter bees being raised though the numbers will be far less than last month. We have already had some cool nights that would lead to clustering at night. The bees will recognize the need for establishing appropriate space for clustering and the need for food stores nearby. They will move and store their provisions accordingly.

For All Beekeepers, it is time to: Get the Bees ready. Get the Environment ready.

Bees:

<u>Feed, Feed!</u> 2:1sugar syrup (4 pounds of sugar for each quart of water) to maximize the concentration of carbohydrates and minimize the excess water they need to remove from the solution. It's getting cooler and it is harder to evaporate that excess moisture.

<u>Consider an Oxalic Acid sublimation or dribble treatment in later October</u> to eliminate any remaining varroa mites that may have been in the colony or brought in by a late season robbing episode. One advantage of an OA sublimation this time of year (besides the obvious effectiveness it has when treating a broodless colony) is that you will not need to crack open the hive bodies and ruin the hive's propolis seal that was created to keep out the imminent winter winds.

Consider a Direct Feed Microbial treatment to improve the gut microbiome of the bees.

Environment:

Remove queen excluders if present.

Tilt hive forward a little bit to assist moisture drainage.

<u>Rake up leaves and debris from around the hive</u> to lessen the opportunity for mouse and pygmy shrew problems.

<u>Add mouse guards.</u> Don't forget.... mice can climb, so protect upper entrances also. If you use entrance reducers as your mouse guard, make sure that the egress slot is at the top not the bottom. It seems counter intuitive, but if the slot is at the bottom in is easily plugged up with dead bees thus rendering it useless. When place 'upside down' it allows the live bees to climb over the dead bodies to exit. A little inconsiderate and heartless of the bees if you lean towards anthropomorphism.

<u>Make sure you have an upper entrance/exit.</u> It helps with ventilation and it is an easy egress point for bees to take cleansing flights in the winter. Sometimes the lower entrances get plugged with ice or snow and even with dead bees.

Add an appropriate feeding shim/spacer and maybe some solid feed in the form of winter patties, a candy board, sugar bricks or cakes, or dry sugar above the top hive body. You may want to add emergency feed in later winter and having a spacer already in place will make that effort possible. Prepare ahead of time.

<u>Make sure there is adequate ventilation</u> to remove moisture from the hive. Bees breathe and metabolize the carbohydrates they consume to produce heat. A by-product of that metabolism is

moisture, and it must find its way out of the hive to reduce dripping from condensation. **Cold wet bees** are dead bees. It is preventable.

Consider adding a moisture board or quilt box or some other method of capturing the moisture and preventing it from condensing and dripping on the bees.

Consider adding insulation at the top of the hive to further reduce the opportunity for condensation.

Consider wrapping your hive to insulate or at least to eliminate infiltration of cold winter winds. Wraps are often done in black with the thought of providing a little solar heat gain on sunny winter days.

Consider creating a wind block with snow fencing, straw bales, large lawn bags filled with leaves (word of caution: straw bales and to a lesser extent, bags of leaves may be attractive to mice, so use them with that warning in mind), or basically anything that you can position to break the force of the direct wind against your hive.

Consider strapping down your hive for the winter to prevent winter winds from toppling the hive.

General Info

Download the forms to register your bees with the Illinois Department of Agriculture. https://www2.illinois.gov/sites/agr/Insects/Bees/Documents/beekeep.pdf (Ctrl+Click link)

Formulas for making 2:1 syrup for fall feeding:

Sugar (lb) 1		2	4	8	16	32
Water	1cup	1 pint	1 quart	1/2/gal	1 gal	2 gal

Note 1: Do not boil sugar syrup (it's OK to boil the water prior to adding sugar but not after). Boiling can lead to the creation of HMF (Hydroxymethylfurfural) which is toxic to honeybees. Note 2: Some people are concerned about using sugar from beets. There is no difference in the sugar (sucrose) from beets vs cane sugar (sucrose). Sucrose is sucrose. Genetic modification (GM) in beets modify the proteins in the plants, not the sucrose. Note 3: Use white table sugar (sucrose) only. Do not use brown sugar or molasses. Do not use organic sugar.

How to make one type of candy board. (CTRL + Click)

ROBBING SCREENS



MOUSE GUARDS

VENTILATION



WIND BREAKS





HIVE WRAPS



October Meeting Agenda

630 new beekeepers- Marcin, John and Ralph talk about seasonal items Q&A

700 Pledge of Allegiance- Tom

705 Old Business-Tom

Developing mentor guidebook

Survey results

710 New Business- Tom

Photo contest- Stephanie

Mentor session October 17th

720 Honey Show- Ralph, Corky, Stephanie Q&A

800 drawing- Stephanie

Anything for the good of the group

Adjournment

Here's to the Frame!

Larry Krengel

The single thing that makes our modern beekeeping possible is the frame in which we ask the bees to build their comb, the brood comb and the honeycomb in the super from which we extract. The traditional frame is made of wood and the comb itself is constructed by the bees. Often, we provide the map in the form of foundation which forms the midrib of the completed comb. Some beekeepers use only a small strip of beeswax at the top of the frame asking the bees to kindly build straight down and attach it to the sides and bottom of the frame. The bees generally cooperate, but occasionally become artistic making the tasks of the beekeeper more difficult.



In times gone by, beekeepers cherished drawn frames and bragged about how many years a frame could be returned to the bees. With time the walls of the cells became thicker and darker due to the multiple layers of propolis and the remains of larval cocoons. Dark frames were a point of pride. Some suggested that the taste of "good" honey was in part due to the added flavor from the darker old honeycomb.

In recent years we have begun to have concerns about the old frames. We began to wonder about (and measure) the environmental contaminants that could be collecting in the frames and wondered about the adverse effects on the developing larva. Many beekeepers now consciously retire frames before they show the great signs of age. I have begun retiring my frames – especially brood frames - at five years. Research does not give today's beekeepers a hard rule. In fact, the contamination of the comb is bound to be a function

of the environment surrounding the hive. Honey frames in supers are less likely to become contaminated than brood frames.

I keep the majority of my bees in McHenry County that is heavily agricultural complete with its "cides", insecticide, herbicides, etc. With no hard guidance, my brood frames are retired after about five years, just my choice, just being cautious about contamination.

I also keep a few colonies in the quiet woods of Northern Wisconsin miles from other beekeepers and a long way from any commercial agriculture. Mother nature runs the show, not agribusiness. Here in the woods my frames are allowed to age especially my honey super frames that are not used for brood rearing on the assumption that contamination is far away.

Because I date my frames the first year of use, I can tell how long they have been in service. In this photo, you can see.... June of 1992. This is the 28th year I have extracted honey from this frame. It has served well.

Although it is hard to see, the frames in this picture are sitting on "Stollers", frame spacers invented many years ago by Mr. Stoller. They are metal brackets attached to the frame rests that maintain the beespace between frames. They



have lost popularity in recent years but are still available in some places. You can buy them from Amazon -

https://www.amazon.com/s?k=bee+hive+frame+spacer&hvadid=78202821764959&hvbmt=be&hvde v=c&hvqmt=e&tag=mh0b-20&ref=pd_sl_9qwi6kgdnp_e

or at a better price from B and B Honey Farm in Minnesota -

https://www.bbhoneyfarms.com/store/index.php?route=product/search&keyword=spacer

Unfortunately, the name Stoller is no longer associated with them – now termed *Steel Beekeeping Spacers for Spacing Bee Frames Evenly*. Too bad he no longer gets the credit of his creation. I would not choose to use them in brood boxes, but they work well in honey supers.

Here is to the frame, the key element in our hives. In the last 170 years, many things have changed in beekeeping, but the frame is still there. I expect it will be little changed in the next 170. Now, off from the keyboard and back to the bees...



NIBA would like to express our deepest sympathies to Marianne and Dave Hill on the unexpected passing of Marianne's daughter Rebekah Parker, please keep them in your thoughts and prayers. Rebekah is survived by her husband, 3 children and a brother and sister.

September photo contest winner, Ralph Brindise's honey frame



We know many of you enjoy taking photos in your apiaries so we'd like to invite you to submit your favorite beekeeping-related photos. We'll conduct an informal poll during the monthly meetings and the top pick will be featured in the following month's newsletter and as the group's Facebook page cover photo. Here are the details:

1. No theme--submit any photo that is honey or bee-related

2. Submit one photo per month by 9:00 pm the Thursday preceding the scheduled monthly meeting

3. Email your photo as an attachment to <u>stephanie.d.slater@gmail.com</u> with "**NIBA Photo"** typed in the subject line

4. Please include your name and a short caption in the body of the email

5. Each month's top pick may be used for future club activities

6. Participate in as many months as you'd like!

New Club Drawing: Congratulations to Kevin Lange for winning the Harvard Egg, Seed, and Beekeeping Supplies gift card. We'll randomly select another member in attendance during our October meeting to win another gift card.

Ask Carl: We asked Carl how he winterizes his hives and here's what he told us:

Quite a change in the weather. Now the bees are flying less. I am just about done with feeding, a couple of nucs need a little more. They are still bringing in some pollen. It's time to put on inner covers

with the upper entrance on the bottom side. The entrance reducer on the bottom has an opening that is 5/16 of an inch by 3 inches long. I use this instead of a mouse guard. I have insulation 1-inch-thick by 20x16 1/4 to put on top of the inner covers. I don't wrap the hives any longer, but put up a snow fence for a windbreak. The bees can handle the cold temperatures but the blowing wind is a problem. A block or 3/4 to 1-inch-thick wood under the rear end of the hives helps drain out condensation faster. Now time to fix what needs fixing, and or do some reading. Check out Randy Oliver's article on <u>The Physics of the Winter Cluster</u>. You can click the link or search Understanding Colony Buildup and Decline: Part 13A at <u>www.scientificbeekeeping.com</u>.

