



**Greater Cleveland
Beekeepers Association**
www.greaterclevelandbeekeepers.com

September 2021

THE HONEYBEE TIMES

Autumn is almost upon us in September...where has our Summer gone?

We have just ended the Summer Dearth and our nice, dark Fall honey production is starting: mums, asters and goldenrod just to name a few.

Speaking of goldenrod, while it does supply a robust dark honey, the pollen coming into the hive leaves a lot to be desired.

Stinky socks smell comes to mind!!!

So, when you open the inner cover, be prepared for this smell - it is normal for Fall, but you should still do a full hive inspection just to make sure there are no underlying problems.

Keep up with your Varroa Mite Control plan as this is important for your hives survival through the Winter months.

Your brood born now will be the bees you see in the Spring. Having a healthy hive at the end of Summer is crucial for Winter survival!

Thank you to everyone who participated and attended the Cuyahoga County Fair this year! While the heat, humidity and rain had an effect on weekday attendance, the weekend was filled to capacity.

Thank you to everyone who entered their items into the Fair - there were many happy faces with Blue Ribbons and Best of Show Rosettes.

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A very big thank you to Sheila St.Clair, our 2021 Fair Chair, and her Planning/Decorating Committee. A lot of thought and planning went into the Club Display, and it came out incredible!

The Club Booth was staffed by Volunteers with varied degrees of experience from First Year Newbees to experienced ones. A very special thank you to Members who went above and beyond and did double and triple shifts over a few days' time - that's Dedication!!!

Hopefully the 2022 Fair will have a bit more normalcy to it...

GCBA also did a 'First' and had our General Meeting AT THE FAIR!!! Phil Bartosh and Sheila Maurer did a great job of explaining the process leading up to and including honey extraction, filtering, and bottling and an array of questions following the presentation. It was well attended by 30 people: Members, guests and people stopping in the Barn to see what was going on and stayed for the talk.

We also had just under 100 people express an interest in 2022 Beginner Beekeeping Classes in February!

I would also like to thank the Cuyahoga County Agriculture Society (Fair Board) and Director Dennis Eck for the Fairs' support of GCBA.

We have a great relationship with them and they allow GCBA to set up a Club table at No Charge to the Organization. Dennis Eck also allocates work passes from his Fair Budget for our table volunteers for **free** admission for the day. This is exceptional because if you volunteer at other Fairs (Medina, Lorain, ...) you must pay your own gate admission to volunteer your time at a Club Booth.

Don't forget that Nomination of Officers for 2022 will be in November with Elections in December.

If you want to be more involved in Club Decisions, you are **Always** welcome to attend our Board Meetings (3rd Wednesday of the month at 6:30pm at the Cuyahoga County Fairgrounds). Maybe even think about running for an office!

Our next Board Meeting is scheduled for September 15th at 6:30pm at the Fairgrounds. All are welcome to attend.

Our September 8th General Meeting will be at the Fairgrounds from 7-9pm (doors open at 6:30pm).

Our speaker will be Peggy Garnes talking about Winter Prep for your hives. If you are a First-Year beekeeper, you should definitely consider attending this meeting for firsthand instruction of Winterizing your hive. Peggy has a wealth of information to share and is a very engaging Speaker.

Hope to see you at the next Meeting and until next month,

Larry

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September Meeting

09/08/2021

September Board Meeting

09/15/2021

Building #25

Cuyahoga County Fair Grounds

The Inspector's Corner

Hello everyone

Hope I got to meet some of you at the Cuyahoga County Fair, remember as the weather cools to follow your mite treatment plans, You might start to notice a weird smell from your hive, it's the start of the fall golden rods honey flow. This is also yellow jacket season so you might want to reduce your hive opening. Try not to set frames outside your hives this promotes raiding from other hives and yellow jackets. Winter prep is right around the corner and GCBA will have a meeting on Winter prep.

Hope to see you at this month's meeting

Thanks, Phil Bartosh 216.470.0934 216.351.6190

sd9990@aol.com Cuyahoga County Apiary Inspector

Well over 300 Beekeepers of Cuyahoga County

in 2021.



FAIR WEEK



The Biology and Control of the Greater Wax Moth

I have talked about wax moths here before, but this is a more in depth focus on the biology of the pest so that we can better understand the problem we are all trying to deal with. Wax moth infestations cost the beekeeping industry millions of dollars each year in colony losses, equipment damage and time invested to clean up and rectify the issues. For that reason and the possible ability of vectoring pathogens, wax moth management is an often overlooked but important responsibility for beekeepers. In this article we will mainly talk about the Greater Wax Moth, *Galleria mellonella*, due to their greater distribution and level of damage and destruction.

LIFE STAGES AND LIFE CYCLE

EGGS

Adult female wax moths start laying eggs in dark crevices of a beehive almost immediately after mating. A single female will lay between 300 and 600 eggs in batches over the course of 3 – 5 days. Wax moth eggs are tiny, about 0.478 mm and 0.394 mm, length and width and can take between 3 and 35 days to hatch depending on the temperature.

LARVAE

When the larva hatches it is between 1 and 3 mm in length growing to between 25 and 30 mm before pupation. The wax moth larva is known as a polipod, with six legs on the thorax and many prolegs on the third to sixth abdominal segments. As soon as the larva hatches it begins burrowing through combs in the hive, lining the tunnels with a silk thread that can ultimately destroy the combs or frames for use by either the beekeeper or the bees. If a wax moth larvae tunnels through active brood comb it can result in bald brood (as the bees remove the cappings in response to the tunnel) or galleriasis can occur when emerging bees become entangled in the silk, ultimately dying of starvation.

The larvae will undergo between 8 and 10 moulting stages before pupation. The amount of time spent in the larval stage is, as is true with every other aspect of the GWM life cycle, variable depending on climatic conditions. The stage can last as little as 20 days or as long as 6 months. The optimal temperature for GWM development is between 84 and 91 degrees, making tropical and sub-tropical environments the areas of greatest proliferation.

PUPAE/COCOON

When the larva is ready for pupation it moves either to the wood of the frame or the box itself and chews a cavity in which it begins spinning the cocoon. Inside the cocoon the pupa morphs into an adult moth, the process taking between 3 days and 2 months, once again, depending on the temperature.

ADULT

After emerging from the cocoon the wax moth is on borrowed time. Due to their rudimentary proboscis, adult GWM's do not eat at all and their only goal before death is to mate. Female wax moths live for 12 days while the males live longer, up to 21 days. At this stage of life the wax moth exhibits sexual dimorphism (distinct differences between sexes), the females are larger and darker than their male counterparts.

(Continued from the previous page)

MATING

Male wax moths start to entice a female into mating by creating a sound from a tympanal organ; interested females respond by fanning their wings. After the initial greeting the male emits a pheromone that starts the mating process. As was stated earlier, the female begins oviposition (laying eggs) almost immediately after mating.

DISTRIBUTION

Greater and Lesser Wax Moths are found almost anywhere honeybees are located. The few areas of Asia and Africa that aren't currently inhabited by the GWM are thought to be temporary vacancies as the environmental conditions change and the wax moths adapt and expand.

MANAGEMENT

The process of managing for wax moth deterrence and eradication should not be considered a solitary action. Integrated Pest Management practices are best here as the goals for the beekeeper are varied depending on whether you're trying to be proactive or reactive and also on your local environmental conditions. What works for me here in Michigan will not directly relate to beekeepers in Texas or Florida and the methods of management are very different depending on whether you're trying to avoid an infestation or clean up the damage already caused.

PROACTIVE DETERRENCE

The best deterrent to wax moths is an active, healthy and vigorous colony. The bees should only have as much space as they can effectively defend and that means removing extra or unnecessary boxes and dead outs from your apiary as soon as possible. Keep your colonies clean of debris, burr comb and areas that are difficult for the bees to access or defend.

Store your comb in areas that get light and have ample ventilation at least until winter (if it freezes regularly in your area) when you can move your boxes to a shed or barn until spring. If that is a problem for you, I have had success moving boxes into airtight lawn debris bags and sealing them with duct tape. Be sure to open those bags in the spring and get those combs in use in your apiary as this method is not perfect and any tiny opening in the bag can allow an adult to move in, where the bag will provide a perfect breeding environment.

Avoid chemical deterrents like mothballs and para-mothballs as the chemicals responsible for the deterring effect have been labeled as cancer causing by the State of California and direct access to the combs can contaminate the honey product. (Before you start to write me talking about the fleeting nature of paradichlorobenzene and how that makes it safe, ask yourself if you feel comfortable placing something the WHO labeled as "possibly carcinogenic" next to your honey product.)

REACTIVE REPAIR

While there are fumigants that can kill all stages of wax moth development, like carbon dioxide, that seems silly when a trip to the chill chest will solve the problem in a matter of hours. If your combs are not beyond repair, place them in a freezer for between 24 and 48 hours and then either store as directed or place into an active and healthy bee colony for repair and reuse.

THE IMPORTANCE OF PROPER WAX MOTH MANAGEMENT

The studies on the ability for wax moths to vector pathogens have indeed found viruses like Israeli acute paralysis virus and black queen cell virus in wax moth larvae and American Foulbrood spores in fecal pellets. Add to that the fact that improper management can create a regional outbreak much the same as expelling mite bombs into your neighboring apiaries and it becomes clear that the problem carries more weight than just the equipment damage or the frustration felt when you first discover a wax moth infestation. Stay on top of your equipment and check stored combs regularly to prevent a major outbreak in your beekeeping operation.

THE FUTURE OF WAX MOTH MANAGEMENT

Studies dealing with entomopathogens and baculoviruses as possible control agents are ongoing and may offer something useful in the future of wax moth pest management. Possible trapping scenarios using volatiles released from food sources and ovipositional sites may also offer some help in keeping regional wax moth populations in check. While these studies are interesting and may very well lead us to a system of management very different from what we're used to, they are still in the discovery stages and are far from ready for public use. Until science brings us a better answer, the responsibility lies on us as beekeepers to keep infestations in check and maintain colonies with the ability to defend their hives from these problematic nocturnal invaders.

REFERENCES:

The Biology and Control of the Greater Wax Moth, *Galleria mellonella* – <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5492075/>

The Life Cycle Of The Wax Moth – <http://www.dave-cushman.net/bee/waxmothlifecycle.html>



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Are you on schedule?

Mite Control Calendar for NE Ohio

April - FA if it's an over wintered hive or nuc. OA if it's a package.

May - None needed unless mite signs are noticed. (See note #6)

June - OA touchup treatment

July - None needed unless mite signs are noticed

August - FA treatment - Very important for winter survival

September - None needed unless mite signs are needed

October - FA treatment

November - None needed unless mite signs are noticed

December - OA touchup treatment

January / February - OA touchup treatment on a >40F day

Notes:

1. FA - Formic Acid. See page #3 for instructions and tips.
2. OA - Oxalic Acid. See page #3 for instructions and tips.
3. Treatment Schedules are for the first week of every month.
4. Clean mite board before each treatment to see effectivity of treatment.
5. A single FA treatment can be substituted with 3 OA treatments, each a week apart.
6. Mite signs - Mites on bees or mites seen in drone comb

Lorain County Beekeepers Association

<http://www.loraincountybeekeepers.org/>



Beekeeping Ain't That Hard!

Honey

Submitted by: Shannon Warder

Late summer, around the first week of September, is prime honey extraction time for backyard beekeepers. The queen has moved down out of the supers by this time and is no longer laying in the upper boxes. The worker bees have made the wax caps on the cells containing honey (once the bees determine the water content in the cells is reduced to approximately 18%) and the super frames are heavy and ready for extracting. A single frame with both sides full of capped honey will yield approximately 3-4 pounds of honey.

Why are we so in awe of honey? Neighbors eagerly await their free jar of honey from their next door beekeeper (the beekeeper's way of showing gratitude for their neighbor's tolerance), shoppers scan farmer's markets looking for the local beekeeper and their jars of liquid gold, friends and family place orders for extra jars so they can give as gifts at the holidays...we all consume honey in our homes in teas, on toast, in recipes, right from a spoon and lament when the jar has gone empty. It truly is a special product given to us by honey bees.

Honey has been consumed as long as mankind has known of its existence. Honey has been found in clay jars in excavated Egyptian tombs (still edible). Beekeeping with the purpose of extracting honey is a hobby done worldwide on every continent (ok, maybe not Antarctica). The invention of the Langstroth Hive made beekeeping more practical for more people and exponentially grew the population of beekeepers in the world.

Honey is antibacterial. Honey never spoils if kept in the right conditions. It can be used as a sleep aide (one tablespoon before bed). One tablespoon a day for several weeks of local honey acts as an inoculation for seasonal allergies. It can be used as a healing balm for burns. To produce a one pound jar of honey bees had to visit more than a million blooms. On average, a single bee produces 1/12 of a teaspoon of honey during its life. Honey seems to quell pain from ulcers and is also believed to kill internal parasites. Honey has a soothing quality and is often found in shampoo, conditioner, body lotions, lip balms, and bath soaks.

Many backyard beekeepers keep bees for the enjoyment of interacting with one of life's most amazing creatures, to help the environment, and to help the bee population thrive. Honey is often thought of as a bonus if there is excess to be extracted from the hive come the end of the season. When this is the case, the beekeeper, and their family and friends, are so very thankful for this special reward for all their hard work of caring and maintaining their hive.



Recipe Submitted By Michelle Killin-Keith



Southern Living

Blueberry-Honey Upside Down Cake

★★★★★

We've found a new favorite flavor for upside down cake.

Active: 20 mins

Bake: 50 mins

Cool: 40 mins

Total: 110 mins

Servings: 12



Antonis Achilleos;
Food Styling: Emily
Nabors Hall; Prop
Styling: Audrey Davis

Ingredients

¾ cup plus 2 Tbsp. butter,
softened, divided

½ cup honey

2 cups fresh blueberries (from
2 [6-oz.] containers)

¾ cup granulated sugar

¾ cup packed light brown
sugar

¼ teaspoon almond extract

1 ½ teaspoons vanilla extract,
divided

1 ¾ cups all-purpose flour

¾ cup fine plain yellow
cornmeal

1 teaspoon baking powder

1 teaspoon kosher salt

½ teaspoon baking soda

¾ cup whole buttermilk

3 large eggs

1 cup heavy whipping cream

Directions

Step 1

Preheat oven to 350°F. Butter a 9-inch square baking pan (at least 2 inches deep) with 2 tablespoons of the butter. Pour honey into pan, tilting pan to spread evenly. Top evenly with blueberries.

Step 2

Beat granulated sugar, brown sugar, and remaining ¾ cup butter with a stand mixer fitted with a paddle attachment on medium speed until light and fluffy, 3 to 4 minutes. Beat in almond extract and 1 teaspoon of the vanilla.

Step 3

Whisk together flour, cornmeal, baking powder, kosher salt, and baking soda in a medium bowl. Whisk together buttermilk and eggs in a small bowl.

Step 4

Add flour mixture to sugar-butter mixture alternately with buttermilk mixture, beginning and ending with flour mixture, beating on medium-low speed until just blended after each addition. Spoon batter on top of blueberries; spread in an even layer with a small offset spatula.

Step 5

Bake in preheated oven until a wooden pick inserted in center comes out clean, 45 to 50 minutes, shielding with aluminum foil after 40 minutes to prevent excessive browning, if necessary. Cool in pan on a wire rack 10 minutes. Gently run a sharp knife around edges of pan, and invert cake onto a serving platter. Cool at least 30 minutes before serving.

Step 6

Beat heavy cream and remaining ½ teaspoon vanilla with a stand mixer fitted with whisk attachment on medium-high speed until stiff peaks form, 1 to 2 minutes. Serve cake with whipped cream.

What are you WEARING?

“Limited Edition”

Not available on our website, please contact Sarah for available sizes and your purchase.

sarah_marie_hotmail.com

216-526-5086





lassified

Classified Ads Any member in good standing may place an ad for bee-keeping related items for sale or trade once a quarter free of charge. This ad will not exceed 1/8th of a page in size. Additional ads will be subject to advertisement fees. Advertisement Fee Schedule: 1/8th Page: \$5 month, 1/4th Page: \$7 month, Half Page: \$10 month, Full Page \$15 Please note: Information posted is a courtesy to GCBA Members and/or a paid advertisement for business entities. GCBA does not endorse or guarantee quality or pricing. Used foundation should not be sold and will not be advertised. Used woodenware cannot be certified free of some diseases like American Foulbrood. Be very cautious when



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GCBA events held throughout the year:

- Field Day in May
- Picnic in July
- County Fair Booth in August
- Special Event in September
- Holiday Party in December
- Live Demonstrations year round

Thank You From All Of Us

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