

# NOTE FROM THE PRESIDENT REGINA RHOA

I wanted to congratulate Sister Isadora and Sister Thekla of Holy Protection Monastery in Whitehaven, PA who just recently completed their Master Beekeeper Certification through Cornell University. The sisters have been beekeeping for 6 years. They don't live close but decided to join MCBA since they enjoy the monthly meetings and the giving nature of the club. Now with the sisters, we have 3 Master Beekeepers in our club. They join Vince Aloyo.

Last month we had an artic chill come through followed by days in the high 50s with one day in the 60's. The bees went from hunkering down to several days of flight. On their available flying days, the bees were cleaning out the dead, taking cleansing flight and collecting water. I hope your hives made it through the artic chill. During these extremely low temperatures, the bees tightly cluster. If they do not have enough food close to the tight cluster on frigid days, they may starve. The hive may plenty of food available, but they can't move to access the food due to low temperatures. Now that we had some warmer days, the bees can take advantage of the food since the cluster can move more readily. I hope you took advantage of these days to check on the status of your hives. I peaked in all my hives to see how they are doing and added fondant to any that needed it.All 30 of my hives are still hanging in there. A few were weak but I have several that were booming.

So as I am finishing this letter today which is Groundhog Day, <u>Punxsutawney Phil</u> did not see his shadow. That means, according to the legend, we're in for an early spring. So historically, Punxsutawney Phil has only been correct 39% of the time. But it always fun to think we may have an early spring.

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# NOTE FROM THE PRESIDENT (CONT'D)

So, what do you do if you lost your hive? You have several options.

- 1. You can immediately break down the hive and take any unused honey stores and give it to your other hives. Brush off the dead bees on the frames and bottom board. Freeze the comb and clean out the dead bees that have their head in the cells, since freezing shrinks the bees and makes it easier to knock out the bees inside the comb.
- 2. Open the hive and brush out excess bees on the frames and bottom board. Remove capped brood and freeze or scrape out frames. Then close the hive to prevent mice from entering. If the temperatures are in the freezing range, you can go back and try to knock out the dead bees in the comb later since at this point, they will have desiccated. Wait for spring and add new bees or wait for a swarm to move in.

Either way, you want to do a rough clean out of bees the best you can. You don't want to leave an excess of dead bees or brood in the hive since the bees/brood will rot and possibly transmit diseases. In addition, mold will develop. A strong colony in the spring can clean out lingering dead bees, but we don't want to give them too much work or expose them to diseases.

This is also a good time to do a diagnostic of your hive to determine why it died. Sometimes it is hard to tell. Is the dead cluster away from the available food? Was the cluster too small? What were your mite counts in September? You did do mite counts didn't you?! If not, you don't know if your hive died from mites. Does the brood look diseased? Did your queen fail (no brood). It is never easy to tell how your hive died but most hives die because of mites!! Even if you did a late treatment, you may have been too late and the winter bees were already affected by mites eating their fat bodies, which affects their longevity.

So, lesson learned. Next year be more aggressive with your mites. Do counts every month, before treatments and after treatments. Your treatment may have failed, so if you don't do counts after treatment, you do you know if your treatment failed!!

Losing a hive is not fun and sometimes discouraging. It is inevitable when you keep bees. The national average of colony loss is in the mid 40% range. My yearly average has been in the 10% range, but I am very aggressive with mites. Everyone wants to blame colony losses on queens, weather, starvation, but in the end, it is probably the mites that killed your bees.

# ANNOUNCEMENTS/EVENTS

# 2024 New Beekeepers' Class

We are excited to welcome back Kelly Downs and Jeanne Gable for another year of top-notch instruction. Registration is now <u>OPEN!</u>

The New Beekeepers' Class takes place every 3rd Tuesday each month from February thru September (**Class #1 - Feb 20th**)

Click <u>HERE</u> for more details and registration info.

# **MCBA Special Interest Classes**

Watch for special Interest classes being announced soon as we finalize dates and times. Some topics are early spring management, honey bee development and diet, bee season preps and items to understand, and an intro to Mead making for beginners.

Sign ups will be on the MCBA website and a minimum of 10 per class must be signed up. Dates will be announced soon.

### **CCBA Annual Conference**

The Chester County annual virtual conference is scheduled for **March 9th.**With 5 "tracks" and over 2 dozen total presentations, this is a great opportunity for all beekeepers. Presentations will be recorded and available to watch for 2 weeks for paid registrants. Click <u>HERE</u> for more information/registration

### **BeeTalks with BeeWorks**

BeeWorks
OPEN HOUSE

February 25, 2024 from 1-4 pm

**Bee Talks with Mike Awckland:** 

1-2 pm How to Install Nucs & Packages

2-3 pm
What Can I Do with All the Bees?

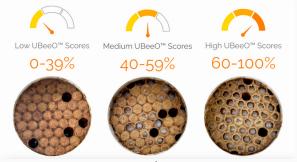
# **GENERAL MEETINGS**

### **January Recap**

Thank you to Roger Thomas (mini presenter: Melapona - stingless bee beekeeping in Cuba) and Dr. Kaira Wagoner (main presenter: honeybee hygiene) for an excellent January session.

If you haven't had the opportunity, please check out the recording of Dr. Wagoner's presentation! She covered a lot of ground on honeybee hygienic behaviors highlighting "unhealthy brood odors". At the risk of oversimplifying, these odors are pheromones produced by unhealthy brood (mite-infested, diseased, etc.) In hygienic honeybee colonies, the bees are more responsive to these odors and seek out/remove the unhealthy brood. This is a very desirable (and heritable) trait, and Dr. Wagoner's work offers a great example of tireless research leading to tangible application in the apiary.

Enter: UBeeO™. Dr. Wagoner and business partner Phoebe Snyder co-founded their company Optera in 2020, and have brought UBeeo™, a hygienic honeybee selection tool, to market. To learn more about honeybee hygiene, UBeeO™, or to place an order, visit Optera's website <u>HERE</u>



www.opterabees.com

### February 22 - 7:00 PM

Mini Presentation - Scott Famous

The advantages of moving from a queen cell program to virgin queen program

Main Presentation - Dr. Heather Mattila

#### Pollen Stress and your colonies; is feeding your bees worth it

20 years of research conducted in Canada and New England reveals the importance of pollen nutrition for fueling productive colonies in a temperate climate. The consequences of pollen stress and the benefits of supplemental feeding will be discussed at both the worker and colony level.

**NOTE**: The 2024 General Meetings will take place both in person (Montco 4H Center) and via Zoom. Based on feedback from our membership, Zoom recordings will once again be offered for ~1 month after the meeting (be on the lookout for the Zoom link(s) in your email). Please be aware these lectures will only be recorded when the presenter grants permission.

# 2024 FARM SHOW

Major shout out and congratulations to Vince Aloyo, Dan Boylan, and Bryan Marcy for representing the MCBA at the 2024 PA Farm Show!

The tremendous display below earned a 2nd place finish in the "County or Association Collective Exhibits" category. Thank you for representing the club so well, and thanks to all who donated/loaned items on display!



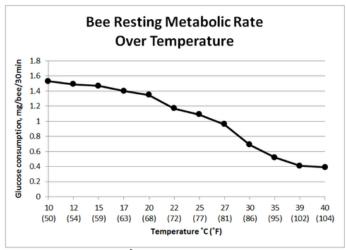
# THE BEGINNERS' CORNER

### **Watching Winter Weather**

Hard to believe we are nearly through the first week of February already! Some recent moderate temperatures have allowed our local bees to stretch their flight muscles and carry out some cleansing/hygienic activities. You may even see them foraging for water in nearby mud puddles and sidewalk cracks, or collecting dust from bird feeders... Before long, more substantial resources like maple trees, too, will come online.

But what's happening inside the hive right now? In healthy colonies, queens are becoming active. Your hives are likely near-broodless now, but not for long. I'll give the mite-lecture a reprieve, and instead suggest that starvation is the primary threat to your bees over the next 6 weeks. While it can be difficult to know exactly how much honey (or pollen) your bees have left, watching the weather closely can help guide some of our actions to help set us up for the best chance of success.

Take a look at the figure to the right. Metabolic rate of honeybees is lowest between temperatures of 30-40C. Lower temperatures means the bees must work



Altmann G & H Gontarski (1963) Über den Wasserhaushalt der Winterbienen. Symp Genet Bioi Ital 12:308-328.

harder (consume more honey) to generate adequate heat. At higher temperatures, bees become much more active, also leading to higher sugar consumption. In other words, 30-40C is the sweet spot for beekeepers. **Note** that this figure refers to cluster temperatures. This ideal range is more easily matched when ambient temperatures are around 40F. Extremes in either direction above or below that range should signal to the beekeeper your bees may be burning through that honey/emergency sugar an an accelerated clip.

Tue 06	<b>43°</b> /26°	Sunny
Wed 07	<b>47°</b> /27°	Sunny
Thu 08	<b>51°</b> /33°	Partly Cloudy
Fri 09	<b>52°</b> /42°	Mostly Cloudy
Sat 10	<b>61°</b> /42°	Partly Cloudy
Sun 11	<b>53°</b> /40°	Partly Cloudy
Mon 12	<b>50°</b> /33°	Showers
Tue 13	<b>44°</b> /28°	Partly Cloudy
Wed 14	<b>41°</b> /28°	Partly Cloudy
Thu 15	<b>39°</b> /25°	Partly Cloudy

Pictured left shows the 10-day forecast for Montgomery County (www.weather.com). Two things that I like to see here: first, the average daily temperatures put us near that ideal low-glucose consumption range (although a bit warm a few days). Second, these daytime highs and dry weather offer a great opportunity to crack your inner covers and check on your emergency/insurance sugar. I don't recommend pulling any frames, but above 40F is great for replacing sugar. Purely my opinion: don't think about pollen supplements just yet. It's more important to provide a sugar source at this point, and there is risk stimulating queen productivity so soon.

Although the extended forecast looks great, late winter/early spring can be unpredictable. Watching weather patterns and planning ahead will become more and more important as brood production ramps up. One of the worst scenarios is a few weeks of warm weather with pollen/nectar access (think: maples), followed by an extended cold snap. A colony can quickly outpace its food supply. But this is a hurdle easily jumped if you are prepared and proactive.

# **COOKIN' WITH HONEY**

Congratulations to the 2023 MCBA Banquet dessert competition winner Krysta Pellegrino, with her Honey Pudding Pots! (https://www.tastemade.com/recipes/honey-pudding-pots)

### **Ingredients:**

#### White Chocolate Decorations

-7 ounces white chocolate, melted

#### **Honey Jelly**

- -2 tablespoon gelatin powder
- -3 tablespoons water
- -1 cup honey
- -1/2 cup sugar
- -1 cup water

#### **Honey Pudding**

- -2 tablespoons gelatin powder
- -3 tablespoons water
- -2 cups cream
- -1 cup honey
- -1/2 cup sugar

## Steps:

#### **White Chocolate Decorations**

- 1. Begin by adding the serving glasses into a tray and into the freezer. This will help speed up the setting process when you're putting the putting the different later together!
- 2.To make the white chocolate decorations, add the melted white chocolate onto a piece of bubble wrap. Use an offset spatula or spoon to evenly spread the chocolate across the bubble wrap. Chill in the fridge for 30 minutes.

#### **Honey Jelly**

- 1. Begin by adding the gelatin and water to a small mixing bowl. Mix until well combined. Allow to sit for 5 minutes before microwaving for 20 seconds.
- 2. Add the water, sugar, salt and honey to a medium sized pot and place on medium heat. Bring to a gentle boil and then take off the heat. Add the melted gelatin and stir until well combined. Set aside to cool slightly white you prepare the second mixture.

### **Honey Pudding**

- 1. Begin by adding the gelatin and water to a small mixing bowl. Mix until well combined. Allow to sit for 5 minutes before microwaving for 20 seconds.
- 2.Add the cream, honey and sugar into a pot and bring to a gentle boil. Take off the heat and add the melted gelatin and stir. Pour ¼ cup of mixture into each chilled serving cup and allow to set in the fridge for 20 minutes. Add the honey pudding next and repeat until you have two layers of each mixture.
- 3. Break off a piece of white chocolate and place into the top of each honey pudding cup before serving.

# MEET THE BOARD

### **2024 MCBA Board of Directors**

#### **Officers**

President - Regina Rhoa Vice President - Robert Brooks Secretary - Melissa Shainline Treasurer - Jeanne Gable

#### General

Past President - Greg Lehman
Vince Aloyo
George Balock
Dan Boylan
Bob "Buzz" Buswick
Kelly Downs
Scott Famous
Derek Pruyne
Rich Steinbeiser

The 2024 Board of Directors is in place. Regina Rhoa took over as President in November and Greg Lehman will stay on as the Past President. Robert Brooks was elected as our new Vice President and Jeanne Gable was elected as the new Treasurer. Rich Steinbeiser has joined as a new board member. Otherwise the existing board members are still in place. Please congratulate the board members when you see them. They do a lot of work behind the scenes. Finally, special thanks to Melissa Natale who served as MCBA Treasurer for 2+ years!

**Note to all MCBA members**: the board holds monthly meetings that can be found on our Events page <u>HERE</u>. Members are always welcome to join these meetings to share thoughts/ideas, or to simply observe the inner-workings of the club.

Montgomery County Beekeepers' Association of Pennsylvania (MCBAPA) is a 501(c)3 non profit organization located in Montgomery County, PA. Our membership consists of individuals who are both commercial and hobby beekeepers. The MCBAPA encourages and promotes active involvement within our community and our organization. Membership is open to an individual who is a beekeeper or has an interest in beekeeping, and who wants to promote honeybee health.

**Our Mission**: Providing educational outreach to the public, supporting fellow beekeepers and working to promote sound beekeeping practices and honeybee health.

# PENN STATE HONEY AND POLLEN DIAGNOSTIC LAB

One question I'm certain *every* beekeeper has pondered: what kind of pollen is that? Throughout the season, I am always curious what is being foraged upon locally, and in what proportions. It may not necessarily guide our actions in the apiary, but it is at minimum very interesting and could certainly help shed light on forage availability from bee yard to bee yard.

Good news: Penn State's Honey and Pollen Diagnostic Lab (PSU HPDL) is accepting samples to detect individual pollen at the genus level and relative proportions in pollen and honey samples! The following message was sent to MCBA by Dr. Christina Grozinger of the PSU HPDL:

"The Penn State Honey and Pollen Diagnostic Lab (PSU HPDL) is pleased to announce that we are now accepting honey and pollen samples for our pollen identification service!

The HPDL uses DNA metabarcoding to identify pollen in samples. This service identifies what plants (identification at genus level) are in a honey or pollen sample and the proportion of each of the total pollen in the sample.

After the sample is processed, you will receive a report with the scientific name, common name representative of the genus, and the proportion it was present in the sample. For example, a spring sample might look something like this: 25% Acer/Maple, 25% Cercis/Redbud and 50% Trifolium/White clover. If you need these data for a scientific study, the HPDL can provide you with the raw or processed sequencing data.

Please see our <u>website</u> for more details about pollen identification and our upcoming service for 2024 - spotted lanternfly identification in honey. Please contact Dr. Michele Mansfield <u>man203@psu.edu</u> for any questions or for additional sample submission information. More details about the Penn State Center for Pollinator Research can be found at <u>pollinators.psu.edu</u> "