



MONTGOMERY COUNTY  
**BEEKEEPERS'**  
ASSOCIATION  
of Pennsylvania

## September 2022

### A Note from the President

*Greg Lehman*

Fall is almost here and that means that it's time to make sure your bees are going into winter STRONG. We talk about how preparing for winter starts in the early spring but right now is an extremely crucial time. Next year when you're looking back on the 2023 season a huge part of that success or failure will be because of what is happening in your hives right now. Honeybees are starting to make winter bees, aka FAT bees. These bees are genetically different from spring and summer bees. They're storing the nutrition that will keep them alive for up to 6 months in their fat bodies which just so happens to be what varroa mites feed on. So to say that this time of year is the most crucial time to be aware of mite levels is not an understatement. You've done so much work in the hives all year so make sure you aren't slacking now!

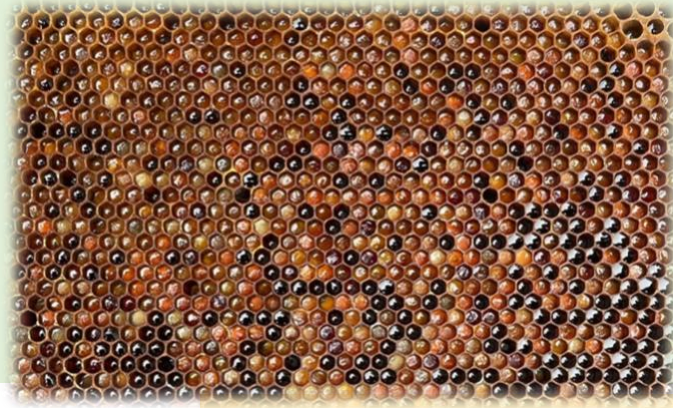
As we enter the final quarter of the year, this is the time that our Executive Board starts to finalize our 2023 plans. We've made some big strides this year and I'm super proud of everything we've accomplished. We hope you took advantage of the bulk products we're buying and heard your requests last year (and we hope to expand those options). If you have a great idea for the club or have a suggestion on how we can expand our programs – please reach out and let us know!

Cheers everyone,  
Greg.

### House (Bee)keeping

Welcome back after a long Labor Day weekend! Hopefully you all had chance to enjoy time with your loved ones and maybe even an opportunity to work your colonies without fear of heat stroke! A few housekeeping items as we gear up for the fall season:

- **Bulk orders:** you all should have received an email detailing an effort to organize bulk orders for hive wraps and fondant (organized by Robert Brooks). Robert has received several orders and secured the minimum quantities to for a bulk discount. If interested in winter hive wraps or fondant, contact Robert at [robertbrooks04@hotmail.com](mailto:robertbrooks04@hotmail.com) (while supplies last).
- **Wax dipping:** the fall wax dipping event is scheduled for **October 8<sup>th</sup>**! Please be aware the signup will close on October 6<sup>th</sup>, and the rain date is set for the 9<sup>th</sup>. For instructions and sign-up information, visit our website: <https://montcopabees.org/Wax-Dipping>. Note there is a separate sign-up for volunteers!
- **Save the date:** Yes this announcement is early, but the date has been set for the Fall Banquet! Mark your calendars for **November 12<sup>th</sup>**!



### What's ahead:

Tue 06	74°/63°		Rain
Wed 07	72°/60°		Showers
Thu 08	79°/57°		Mostly Sunny
Fri 09	82°/58°		Mostly Sunny
Sat 10	82°/61°		Partly Cloudy
Sun 11	80°/63°		Showers
Mon 12	79°/61°		Showers
Tue 13	78°/60°		Showers
Wed 14	81°/60°		Showers
Thu 15	83°/60°		Showers

[www.weather.com](http://www.weather.com)

### What it means:

After what felt like the hottest and certainly the driest summer in recent memory, it appears we are finally turning a corner towards fall weather. With the extreme heat subsiding, some options for mite control are back on the table. This is a great time to get back in your hives, perform your mite counts, and begin to assess stores/hive weights as we race towards winter.

# General Meetings

September 22, 2022 (7PM)

## Mini Presentation: Dr. Gregory P. Shelley

- Beekeeper Personality Factors and Hive Management Behavior
  - An overview of aspects of beekeeper personality and social value orientation related to how the beekeeper manages their colonies, primarily the use of in-hive chemicals to manage mites

## Main Presentation: Bill Hesbach

- Thermoregulation and Ventilation
  - This talk starts with how bees control the internal hive temperature using thermoregulation and what effect that has on the colony. Then we discuss convection flows inside a colony as a precursor to understanding ventilation. In the final segment, we explore the concept of a condensing colony versus the more common practice of adding ventilation. When finished, you will better understand what role ventilation plays in a natural hive environment where the bees control all the hive gases.

## Looking back:

If you missed the August General Meeting, check your email for the recorded zoom link (sent August 31). We enjoyed a jam-packed session with Stephen Repasky (Single Brood Chamber Management) and Ellen Codd (Pollen Substitute: what, when, why, and how?)

- In this session, Steve covered a lot of ground on single brood chamber management
  - One of the keys of this style of beekeeping is to really place an emphasis on “nectar management”
  - Proactive nectar management, particularly in early spring, is critical for encouraging proper use of the single brood chamber real estate by the colony (so add those supers early!)
- If you are considering giving this style a shot, it may be best to wait until spring to make that transition. This is a tricky time of year, as the brood nest/storage patterns become more static
- Pick up a copy Steve’s book, *Swarm Essentials* [HERE!](#)
- In a short matter of time, Ellen Codd shared a ton of great information on pollen patties/pollen subs during a mini-presentation (answering what, when, why, and how to feed pollen sub, or if to feed at all!)
  - See the next page for a homemade pollen patty recipe generously shared by Ellen

## Calling all Presenters!

It may be hard to believe, but the main program for our 2023 general meetings is filling up fast! However, we are looking for “Mini-Presenters”. Hopefully you are familiar with the format of our general meetings, but we really enjoy kicking off each session with a 15-30 minute “mini”. This could include anything beekeeping or pollinator related! If you are interested in leading a discussion or sharing some cool material, please let us know!

## Pollen Substitute Patty (using Megabee or Ultrabee)

4 c Megabee or Ultrabee

6 T corn or canola oil

1 T soy yogurt (optional)\*

Sugar syrup (2 c. sugar, 1 c boiling water); may need all of this or slightly less. (If the sugar syrup is pretreated with invertase overnight, the pollen sub does not dry out.)

Put oil, soy yogurt and about  $\frac{3}{4}$  of the sugar syrup in the bottom of a bowl. Then add the MegaBee or UltraBee. (This avoids having powdered Mega or Ultra left on the bottom of the bowl after mixing.) Mix ingredients together by hand or with a bread mixer, using as much sugar syrup as needed to mix but not have a mixture that is too sticky. After thoroughly mixing, cover and let sit for several hours or overnight, if time allows. During this time, the powdered Mega or Ultra absorbs more liquid, facilitating rolling out the patties.

Roll patties out between two sheets of waxed paper (as you might do in making a pie crust) and store in the refrigerator or freezer in a closed container until used. I roll out an ice cream scoop amount and roll it in an elongated shape. After removing the lower piece of waxed paper, place a patty or piece of patty on top of frames in the brood area, between brood boxes (not on top of an upper box containing no brood). Use an amount proportional to the size of the hive you are feeding. For a nuc, I cut one patty into four strips and use one strip per nuc. If the sugar syrup is not “inverted,” the patty will dry out with time, making it unpalatable. Also, small hive beetles love patties, so over feeding is not wise! Feed only when you would like to enhance brood rearing-early spring, late summer/early fall. When lots of pollen is coming into the hive, there is no need for supplemental protein feeding. Do not feed in winter.

Makes ~12 ice cream scoop sized patties. Of course, the recipe can be scaled up or down according to your needs. Store in a sealed container in the refrigerator or freezer. Pre-made patties are also commercially available.

(Recipe adapted by Ellen Codd from Kelley Beekeeping’s directions for MegaBee patties)

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\*Bee bread is a fermented product; yogurt contains some bacteria that are similar to those found in bee bread and may induce fermentation of the patty. [AM Ellis and GW Hayes, Journal of Apicultural Research and Bee World 48(3): 215-216 (2009)]

# A Pollinator in Peril

## and Notes on Milkweed

In sobering pollinator news, a crowd favorite, the monarch butterfly, was added to the Endangered Species list in July 2022. The ongoing threat of native habitat decline is a well-known crisis within the beekeeping community. As we enter the fall planting season, perhaps this news will have an impact on your own variety selection as you fill out your native pollinator spaces!

According to the Brandywine Conservancy, there are over 140 known species of milkweed, 11 of which are native to Pennsylvania. The most common include common milkweed, swamp milkweed, butterfly milkweed (or butterflyweed), clasping milkweed, and whorled milkweed. For additional information on these and other native milkweed species, check out [Milkweeds of the Mid-Atlantic](#) (Xerces Society/Monarch Joint Venture).



Although many associate the fall with the end of the growing season, this is actually a great time of year for planting and expanding your pollinator-friendly spaces for years to come. The next few months of (hopefully) moderate weather offer ample time for transplanted perennials to develop roots and successfully overwinter. This will also give you a head start and likely lead to more robust blooms in 2023 versus planting in the spring. Non-vernalized seeds can also be sown directly in the fall (allowing winter to naturally 'cold-treat' the seeds for you). However if you like instant results and want a head start you may wish to opt for live transplants. For more details on milkweed propagation, click [HERE](#) for a great guide by the Monarch Watch organization.

<https://edgeofthewoodsnursery.com/>

<https://bhwp.org/grow/native-plant-nursery/>

<https://www.prairienursery.com/>

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## BeeWorks, LLC



Congratulations to our friends at BeeWorks, LLC! In addition to being a distribution center for Forest Hill, BeeWorks is now also an official distributor of Dadant products!

BeeWorks, LLC is open on Wednesdays from 2-6:30PM, or you can schedule an appointment for your convenience. Click [HERE](#) to visit the BeeWorks, LLC website.  
Beeworksllc01@gmail.com



# The Beginners' Corner

Derek Pruyn

Welcome back, fellow beginners! Hopefully your colonies are healthy and low in mites as we enter the home stretch of pre-winter preparation. In this month's edition, I thought I would talk a little bit about supplemental feeding (sugar and pollen sub). Early in the beekeeping journey, it can be a bit confusing figuring out WHAT you should be feeding, IF you should be feeding, and WHEN you should be feeding. As always, nothing I say here is 'absolute', and when in doubt you should be leaning on your mentor(s) to determine your best course of action. That said, the following is a very rough guide for how I view supplemental feeding.

## 1:1 Sugar Syrup

- 1:1 sugar syrup is a solution made up of 1 part white sugar and 1 part water (by weight). This formulation simulates the composition of natural nectar.
- Benefits: stimulation of brood production/queen activity, stimulation of wax production, bridge the gap through prolonged nectar dearths or interrupted forage activity
- Timing: spring to fall – avoid feeding 1:1 too early or late in the season when cold weather occurs
  - Bees need time to cure stored 1:1 syrup (just like nectar) – we are approaching a management shift from 1:1 to 2:1 (see below)
- Management strategy: ideal for establishing new colonies (nucs/packages/splits), stimulating brood production in late-season requeening effort, and wax production. I argue in year 1 or an 'establishment year' you should feed 1:1 syrup throughout season. **The need to feed 1:1 in year 2 and subsequent years is substantially diminished unless you have specific goals to dictate otherwise.**
- Feeding 1:1 syrup with honey supers on will lead to a product that is not authentic honey. If you are feeding in the spring to encourage populations, consider pulling your syrup when you add your first super(s).

## 2:1 Sugar Syrup

- 2:1 sugar syrup is a solution made up of 2 parts white sugar and 1 part water (by weight). This formulation much more closely resembles the consistency of honey and can be readily stored by the bees
- 2:1 sugar syrup is routinely fed by many beekeepers as a late season insurance policy
  - As temperatures drop and forage opportunities decrease, honeybees will gather this syrup and backfill available comb. While this solution is not as nutritious as natural honey, it can provide some much-needed weight as colonies prepare to overwinter
- Convention says a hive should contain anywhere from 60-90 lbs of honey to survive the Pennsylvania winter (with plenty of room for debate). It's vital for beekeepers to know what's happening inside the hive and have some sense of the bees' stores going into winter. If your frames are light, consider feeding 2:1 as the season allows.

## Solid Sugar

- Feeding solid sugar (candy boards/sugar bricks/fondant) is almost exclusively used as a winter insurance/emergency carbohydrate source
- There are several methods and concoctions for feeding solid sugar. Be aware sugar is not nearly as nutritious for the bees but can certainly be implemented to prevent starvation (a very common cause of colony loss).
- Many beekeepers will add this as part of a routine winter configuration OR as needed over the winter/very early spring. Working quickly, you can crack the lids of your hives on moderate winter days to assess how much, if any, sugar is being consumed and add more if needed.

## Pollen Sub/Pollen Patties

- If you missed the August General Meeting, I encourage you to watch the recorded zoom link for Ellen Codd's mini presentation. She covers a lot of ground on feeding pollen sub/pollen patties and some additional discussion may help guide you down this path. Feeding pollen patties or pollen substitute really requires you to assess your goals and colony condition. I would argue that feeding pollen should not be an automatic or programmatic addition to your beekeeping management strategy. While I've only been keeping bees for 3 short years, I have yet to feed any supplemental pollen/pollen sub. Please note that is not a recommendation; my apiary has simply not called for it!

## MCBA – Committee Spotlight

In this section, we'd like to call out the hard work of our club's committees! Behind the scenes, we have board members and general club members that work their beehinds off coordinating events, activities, and other services, and their (volunteer) efforts should be recognized!

This month, a huge thank you to the **Picnic Committee!**

- Robert "Buzz" Buswick (Committee Chair)
- Dan Boylan
- Porter Bush
- Jeanne Gable

On July 30<sup>th</sup>, we had a great time at our annual summer picnic at the Carousel at Pottstown with great food, company, and beekeeping stories! It can be tough getting people together in the summertime, but we enjoyed seeing everyone's faces and getting inside away from the heat for a few hours!



Congratulations to our 2022 Smoker Contest winners (Matt Specht, Bonnie Korytowski, and Linda Kamnik) with the tiebreaker going to Bonnie!

## Education with Montgomery County Beekeepers' Association

### Beginners Class with Mark Antunes

- Class #8 – September 20 – 6PM at the Montgomery County 4H Center
  - <https://montcopabees.org/New-Beekeepers>

### Intermediate Class with Dr. Vincent Aloyo

- Class #8 – September 28 – 6PM at the Montgomery County 4H Center
  - <https://montcopabees.org/IntermediateCourse>

# Cookin' with Honey

While people get into beekeeping for a number of reasons, it's a pretty safe bet that most (if not all) beekeepers love HONEY. I continue to be fascinated by the subtle variations – both in color and flavor – that occur throughout the season.

It's a fair argument to say that honey is best enjoyed in its purest form: raw, unfiltered, unpasteurized, undoubtedly any time. But honey as an ingredient is rather versatile with a tendency to elevate even the most basic recipes!

I look forward to filling this section out with specific recipes in future newsletters (ahem... please feel free to pass along your favorite recipes to share...). But for now, let's start with some basics!

## On the Smoker

One of my favorite uses of honey is as a binder for smoked meats. If you enjoy smoking ribs, pork shoulders, briskets... really anything... then consider using some honey in your binder recipe! I use about 3 parts mustard (yellow or Dijon) and 1 part honey. Mix well, spread evenly across your protein, then add your favorite dry rub. The binder will work to hold in juices/moisture, adhere your rub, and develop into an absolutely delicious crust. Be sure to maintain lower cooking temperatures as honey does have a tendency to burn at high temps.



## In the Oven

I'm always looking for new ways to use honey. One of the easiest ways is to replace sugar (or some proportion of sugar) in recipes that do not already call for it! Doing this, however, does require a bit of math if we consider these three things:

1. Honey is sweeter than regular old sugar
2. Honey contains a liquid component (typically between 15-20% water)
3. Honey is acidic

In other words, you may not want to simply swap 1:1 honey for sugar. For every 1 cup of sugar replaced, substitute  $\frac{1}{2}$  to  $\frac{3}{4}$  cup of honey (depending on your sweetness preferences). Next, for every one cup of honey substituted in, reduce liquid ingredients by  $\frac{1}{4}$  cup. Finally, add  $\frac{1}{4}$  tsp baking soda for every cup of honey used. This will help balance the acidity! For more: <https://www.thekitchn.com/4-rules-for-successfully-swapping-honey-for-sugar-in-any-baked-goods-230156>