THE PUBLICATION OF WILL COUNTY BEEKEEPERS ASSOCIATION • MARCH / APRIL 2023

PLEASE JOIN US FOR NEXT MEETING:

March 15, 2022 at 7 pm Will County Farm Bureau 100 Manhattan Rd Joliet, IL 60433

FEATURED TOPICS:

- Honey Bee Coalition Updates
- · Beau Wright on making hive boxes
- Feeding bees the right sugar mix
- Register to win a bee package! See below for info.

THIS MONTH IN YOUR HIVES

MARCH

- If temperatures are warming up, consider feeding
 1:1 sugar syrup and placing in pollen patties
- Check for mites and treat before putting on supers

APRIL

- Check for mites and treat before putting on supers
- Begin weekly checks looking for signs of swarming and space
- Continue to feed 1:1 sugar syrup
- Consider checker boarding or other swarm prevention techniques
- Super-up (when bees cover 7 of the 10 frames, add a super)



WHAT'S HAPPENING IN THE HIVE

Additional information regarding your hives for March and April was kindly provided by John Leibinger for both veteran and new beekeepers.

Chores of the Month - March

Chores of the Month - April

SPECIAL MARCH MEETING RAFFLE - WIN A BEE PACKAGE!

NEW members that sign-up or have signed up this year will receive one free entry to win a bee package. Existing members can purchase raffle tickets for only \$5 per entry. Tickets will be pulled at our April meeting. Must be present to win!

Thanks to Meyer Bees for the package donation.





BY CHARLOTTE ANDERSON, MASTER BEEKEEPER

Feeding bees sugar water

When honey bees are not able to collect enough food through natural sources, beekeepers need to help. The most common way to help a hungry colony is by feeding bees sugar water.

While sugar water or sugar syrup is not exactly the same as plant nectar, it will keep a colony alive. However, supplemental feeding is not without its challenges. Failure to do it right may create more problems for your hives than the ones they are already facing.

What is Sugar Water & How You Make It?

What exactly is sugar water and why should we use that for bee food? The most common recipe for bee feeding involves mixing white granulated cane sugar and water. Granulated sugar dissolved into water, mimics natural plant nectar. While it is not exactly the same nutritionally, it is very similar in sweetness. And, honey bees are accustomed to collecting liquid food. When making sugar water for your bees, it is important to only use white sugar. Never use molasses or brown sugar as this will make your colonies sick – or dead.

Adding Supplements

Many beekeepers use a feeding supplement added to the feeder. This is usually in liquid form and encourages good feeding. It also prevents your syrup from becoming moldy. Other than the products available commercially, there are homemade recipes for using essential oils to feed bees. This is thought to promote better bee health too. Be cautious, these products are concentrated- add only a small amount.

Sugar Water Recipes

There are 2 basic recipes for bee sugar water commonly used by beekeepers. We are mixing a percentage of water to a percentage of dry granulated sugar. You can measure by weight or volume, it does not matter.

1:1 Spring Sugar Water Recipe

Mix equal amounts of granulated sugar and water to create 1:1 sugar water. You can measure with cups or use weight as the unit of measure. It does not matter because either method of measuring will result in a 1:1 sugar water syrup.

10 2/3 cups of granulated sugar

10 2/3 cups of warm water

2:1 Fall Sugar Water Recipe

A 2:1 ratio contains twice as much sugar as water. For example, 8 cups of sugar to 4 cups of water. When using this mixture, use very warm water to dissolve the sugar easier. However, do not boil your bee syrup, this is not good and it is not necessary.

Feeding Bee Colonies in Spring or for Buildup

Spring is a time of growth as over-wintered colonies are busy raising brood. New hives that are started from buying packages are struggling to get their colony established. Feeding honey bees a 1:1 ratio, promotes brood rearing. This thin mixture is closest to the sweetness of most natural nectars. With "new nectar" being placed in the comb, the bees are not afraid of starvation and are more likely to ramp up brood rearing.

This same method of feeding 1:1 applies to any time throughout the season when you have a colony in need of food. Perhaps a new split hive could benefit from some supplemental feeding.



Feeding Bees in the Fall

It is not uncommon to find colonies that are not quite ready for Winter. These colonies run the risk of starvation without supplemental feeding. The ratio of 2:1 is fed to honey bees to promote food storage. This mix is not as likely to encourage brood rearing and more likely to end up stored in comb for Winter.

Of course, this will not be real honey but the colony will store it as such. It is much better to feed your colony rather than have them starve in the middle of Winter. Fall feeding should be completed before cold weather arrives.

When Should I Start Feeding Bees Sugar Water?

You should not have to feed every colony all season. If this is happening, something is wrong. There are two situations where a beekeeper may consider providing supplemental food.

If you purchase bees in a package, they arrive on the scene with no resources. They have no drawn beeswax comb, food stores, or brood. Begin feeding a new colony 1:1 immediately and continue until all of their comb is drawn out. Because they begin with nothing, understanding how to feed a new package is critical to their growth. This can not wait several days.

Problems with your queen honey bee, a late freeze that causes a nectar dearth and other issues can make hive buildup very difficult for new colonies. Even established colonies may benefit from supplemental feeding at times. Weeks without rain that create a lack of food can cause a temporary decline in any hive. Offering these colonies a helping hand can be the difference between a strong colony going into Winter or a weak one that is dead before Christmas.

When You Should Not Feed Bees Sugar Water

Yes, there will be times when you should not be feeding bees syrup. These include times of cold weather, when your honey collection supers are on and a few other situations.

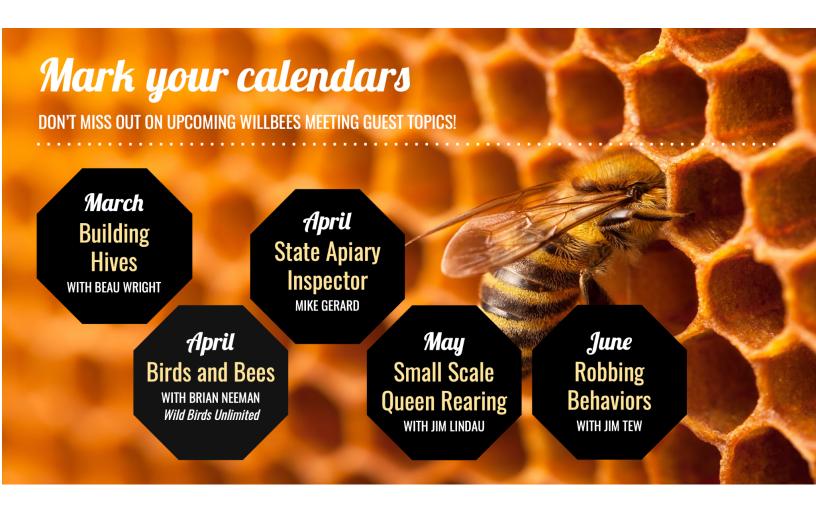
Remember, never feed bees when honey collection supers are on the hive. I am referring to boxes of honey that are intended for human consumption. When you add a honey super to your hive for yourself – feeders should come off. The bees will use any nectar (or nectar-like substance) to make honey. Honey produced from sugar water instead of nectar – that's a no no. And, its not real honey.

Feeding bees is a lot of work and expense. How much you need to feed will depend on your climate and foraging conditions.

Too little food during Spring build up causes the bees to sacrifice brood or developing young bees. Poor foraging conditions in the Fall prevents storage of food for Winter survival.

Especially when keeping many hives in one location, remember that we can not always rely on natural nectar. This is another example of why it is important to connect with local beekeepers – they will know the key times when you may need to consider feeding your bees.

Please visit Charlotte Anderson's website for more engaging articles.



EECABULAR\

Time to expand your bee vocabulary.

Bring your answers to our next meeting to earn a tasty treat and to impress your fellow beekeepers!

Apis mellifera Creamed honey
Bee escape Dividing
Braula coeca Grafting



Don't be a drip, dip.

Dipping is a casual term used for things like, "No double dipping into the salsa", or "Let's go skinny dipping in the creek" which I have not tried... yet. But what's all this talk about dipping woodenware? I never heard about this until this year.

While dipping woodenware has been around for decades in other countries like Canada, it's just starting to gain local presence, and why not, it's a much better alternative to painting. What you ask, "No painting?"

Let's get into what dipping actually is. For years, beekeepers in different parts of the world have been looking for ways to preserve their woodenware. Wet and humid locations played havoc on wood pine boxes, that eventually broke down the wooden fibers and shorten the longevity of their hives. In some parts of the country, woodenware would begin to rot after just a few years.

Painting is the most popular method of protecting our hives, and this has worked well for most of us. The problem is paint is a thin coat of latex that sits on the top of the exterior surfaces of the wood. The interior is completely unprotected, and some of us don't paint the edges of the boxes that sit on one another (a good place for standing water). A dent, scratch or crack in that protective layer opens the door for water to start to break down the wood. And now you're back to sanding and repainting if your box hasn't rotted away.

Dip to protect

Dipping goes way beyond surface level. Bottom line, it's a unique combination of waxes that are melted to 320 degrees. Raw or painted woodenware is submerged into the molten wax for 3 to 10 minutes. Here's the amazing part, the wax penetrates

completely through the wood, not just the surface. The end result is a hive box that is impermeable to water. So, let's say you damaged the corner of your super with your hive tool, no worries, the wood is fully protected through and through. No need to bring out the paint bucket and brush to touch things up. And for those that have painted boxes, no problem they can be dipped as well.

So what's the catch?

You could certainly invest in the wax melting equipment and then there's the wax, but that's going to set you back some bucks, plus working with fire and wax is a potentially dangerous combination. The better option for most hobby beekeepers is to find a local vendor that will do the dipping for you. Meyer Bees out of Minooka is one such vendor.

Fees and Longevity.

So how much will it cost and how long will it last? For about \$5.00 per hive box, your equipment will be protected, meaning rot proof for 15 years or longer. That's pretty incredible considering the time it takes to paint boxes with primer, and then 2 layers of paint. And now that paint is \$40-\$70 per can, the fees make it a no brainer.

So let's go dipping with nacho chips, swimming holes and hive boxes.



BY KEITH MEISER

Building an observation hive for the Will County Fair

One of the goals of the officers and board for 2023 is to raise awareness of Willbees with the public.

We have identified several events that we can be present at such as Earth Day and others. The top of my list was to again have a booth at the Will County Fair in August.

I had dropped out of beekeeping 30 years ago, eventually moving to a small house in Joliet, but I still had a lot of beekeeping equipment and supplies. About 5 years ago, my wife and I went to the Will County Fair and ran across the Willbees booth and began talking bees with John Kiefner. After about 15 (or was it 30+) minutes, my wife informed me that we still had 90% of the fair to see, so I reluctantly said goodbye and left. Prominent at the display was a single frame observation hive.

I got my start in beekeeping after seeing an observation hive at the Hoopeston IL Sweetcorn Festival in 1971. I started with 2 hives the next spring and eventually grew to about 75 before I had to give it up. I maintained a couple of observation hives, taking them to grade schools and farmers markets, so I knew the attraction. Those have disappeared but along the way someone gifted me a very old oak observation hive that I knew was in my basement. I dug it out to clean it up but was very disappointed with the condition.

After attempts to strip the finish with "indoor safe" stripper, finding no 2 screws that matched, and window glass that could shatter at the worst possible moment, I decided to let it go and start over. I looked online for a replacement, but none satisfied what I wanted... a display observation hive one frame thick (so the queen would have nowhere to hide), very portable but stable, and not cost an arm and a leg. I decided to do it myself and set myself a deadline to finish it in time for



the February board meeting to make sure it would satisfy our requirements.

A disclaimer: 2 years ago, I had back surgery and a spinal fusion that kept me from any woodworking, so I was starting from scratch. All my tools were scattered, and my workbench and table saw were buried. I had to clean up.

I love the look of red oak and when I was able to find a full 1 inch thick by 5-1/2 inch wide (5/4x6) ready to use lumber, I bought it (even though I had sticker shock).

I worked out that I could produce an observation hive 2 deep frames high from an 8 foot board. I cut out the approximate lengths and sizes, and then clamped the pieces together to verify the critical "bee space" around the frames inside.







I ordered vent screens from Amazon and found stainless steel hardware and polycarbonate glazing (\$\$\$!) at Menards. After plenty of tweaking and a little work with a router I was able to complete what I thought would be appropriate for people to see the bees close up without any danger of mishaps.

I'm not going to publish dimensions or plans, but I will be bringing it to the March meeting and you are welcome to bring your tape measure and note pad if you wish.



BOOK NOOK

Mating Biology of Honey Bees

By Gudrun Koeniger, Nikolaus Koeniger, Jamie Ellis, Lawrence Connor, published in 2014

Reviewed by Jim Moleski

From the beginning of time to modern day the author explores the biology of the hive and an extensive look into the mating process. The book details the life of the unmated queen starting from the orientation flight to the mating process. The exploration of the amount of drones in the (DCA) Drone Concentration Area, time spent there and amount of visits per day made. They go on to explain that in order to keep the genetic nature of the hive strong the queen has access to a huge number of drones that

represent the local population of honey bee colonies. The book is built on decades of research by the authors on this very topic. If you're interested in a detailed look on this subject that still holds some mysteries, I would recommend giving it a read.

Our Will Bees lending library offers a vast selection of books and videos for you to enjoy. Be sure to check out a book at our next member meeting.



This month's recipe was provided from www.bonappetit.com.

Charred Brussels Sprouts With Warm Honey Glaze

Provided

1½ lb. brussels sprouts, trimmed, halved

1/4 cup extra-virgin olive oil

½ tsp. kosher salt, plus more

Freshly ground black pepper

1/4 cup honey

¹/₃ cup sherry vinegar or red wine vinegar

3/4 crushed red pepper flakes (optional)

3 Tbsp. unsalted butter

3 scallions, thinly sliced on a diagonal

1 tsp. finely grated lemon zest

Step 1

Place a rimmed baking sheet on the bottom rack of the oven; preheat to 450°. Toss brussels sprouts and oil in a large bowl; season with salt and black pepper.

Step 2

Carefully remove the baking sheet from the oven. Using tongs, arrange the brussels cut side down on a baking sheet. Roast brussels on bottom rack until softened and deeply browned, 20–25 minutes.

Step 3

Meanwhile, bring honey to a simmer in a small saucepan over medium-high heat. Reduce heat to medium-low and cook, stirring often, until honey is a deep amber color but not burnt (it will be foamy, that's okay), 3–4 minutes.

Step 4

Remove from heat and add vinegar and red pepper flakes, if using, and whisk until sauce is smooth (it will bubble up quite aggressively when you add the vinegar before settling). Return saucepan to medium heat, add butter and ½ tsp. salt, and cook, whisking constantly, until the glaze is glossy, bubbling, and slightly thickened, 3–4 minutes.

Step 5

Transfer brussels sprouts to a large bowl. Add glaze and scallions and toss to combine. Transfer to a platter and top with lemon zest.

Send us your favorite recipe with a picture of your creation!

HURRY, ORDER YOUR WILLBEES WEARABLES TODAY!

It's time to ditch the old rags and put on some new threads. WillBees is offering hats, t's and sweatshirts in a variety of colors. Please place your order at our next meeting or by mail. To view our wide selection, download the order form by <u>clicking here</u>.

Mail the completed order form and check payment by March 24 to:

Will County Beekeepers Association – Attn Fran Miller c/o Will County Farm Bureau 100 Manhattan Rd, Joliet, IL 60433



Physics, Bees and Fishing

THIS MONTH'S BEE ADVOCATE IS **WILLBEES BOARD MEMBER DENNIS** WISNOSKY

Dennis is a scientist (Physics) and an engineer (Electronics) by education. "I thought when I decided to try beekeeping about 8 years ago that this must be all figured out after thousands of years". Nope! Dennis keeps 4 Slovenian families and 4 Langstroth colonies on a 10-acre Conservation Easement property near Plainfield. He and his wife live in Naperville where he grows the tomatoes in this "Bloody Dennis" drink. "I am happy to join the Board and will do my best to make a contribution to this wonderful club," said Dennis.



Dennis sends an open invite to any club members who would like to visit the property. Bring a fishing rod to fish in the 3-acre lake.

We love to feature you within BeeSpace! Please send us a photo and a couple paragraphs about you and beekeeping.

UPCOMING EVENTS

ATTENTION: WILLBEES NEEDS YOU!

We need your help to spread the news about honeybees and all that they do for us!

The Will County Beekeepers Association is working to spread the news about honeybees at some upcoming community events, and we need your help. You are knowledgeable about honeybees and we need you to share your knowledge.

Please mark your calendar for the events listed below. These events are family friendly, so bring the entire family. Bring your bee suit, veil, tools, and your knowledge, to speak with community members about honeybees. There will not be any sales of products, but simply, a knowledge share.

The events are:

Saturday, April 22, 2023: The Forge Earth Day Celebration.

Located in Lemont, IL, The Forge is an outdoor Adventure Park with hundreds of activities & events to enjoy including, but not limited to Climbing and Zipline, hiking, and kayaking.

Click for more information

Saturday, May 20, 2023: Bluestem Earth Festival.

The event will take place at Bronkberry Farm, 18061 South Bronk Road, Plainfield. Click for more information

Wednesday - Sunday, August 23-27, 2023: Will County Fair.

The Fair is located in Peotone, IL, just east of Route 57. The event will run in conjunction with the Will County Farm Bureau. <u>Click for more information</u>

There will be more information available about these events. Please sign up to help wherever you can. For more information or questions, contact Sue Gregory, WillBees Treasurer at susangregory418@gmail.com

ON-GOING ED

The SouthWestern Ohio Beekeepers Association SWOBA is pleased to be offering the following free lectures.

Sunday, March 26 (6:30 PM - 07:30 PM)

Mr. Randy Oliver.

Sunday, Apr 23 (6:30 PM - 07:30 PM) (Link to come)

Mr. C. Ph.D. Meeting

Wed, May 24 (6:30 PM - 07:30 PM)

Mr, Chris Hiatt Meeting

Sunday, June 25 (6:30 PM - 07:30 PM)

Mr. Jerry Hayse Meeting

Sunday, July 23 (6:30 PM - 07:30 PM)

Mrs. Rebecca Melton Masterman Ph.D.

Sunday, August 27 (6:30 PM - 07:30 PM)

Mr. Jim Masucci

Sunday, September 24 (6:30 PM - 07:30 PM)

Mr. Dewey Caron. Ph.D.

Wednesday, October 25 (6:30 PM - 07:30 PM)

Mrs. Michelle Flenniken, Ph.D.

Beekeeping Around the World

PennState Extension is offering a really interesting webinar series called "Beekeeping Around the World." Get your passport and visit expert beekeepers from Canada, Switzerland, China and other destinations on our small planet.

Thursday March 2, 2023 (12:00 PM-1:00 PM ET)

Beekeeping Around the World: Apimondia

Thursday March 9, 2023 (12:00 PM-1:00 PM ET)

Beekeeping Around the World: The Canadian Prairies

Thursday March 16, 2023 (12:00 PM-1:00 PM ET)

Beekeeping Around the World: East Africa

Thursday March 23, 2023 (4:00 PM-5:00 PM ET)

Beekeeping Around the World: Australia

Thursday March 30, 2023 (12:00 PM-1:00 PM ET)

Beekeeping Around the World: China

Thursday, April 6, 2023 (12:00 PM-1:00 PM ET)

Beekeeping Around the World: Argentina

Thursday, April 13, 2023 (12:00 PM-1:00 PM ET)

Beekeeping Around the World: Switzerland

Breakfast with the Bees hosted by James Konrad

The Fox Valley Beekeepers Association extends an open invitation to all beekeepers to join them via Zoom for a group chat every Saturday at 7:30am Central Time. Guests are encouraged to ask questions and contribute to various topics that relate to the season. Please email James at james@jamesgardenbees.com for more information.

ODDS & ENDS

Survey Says

Congratulations to Janice Carrigan, winner of our \$50 dollar gift card drawing. Thank you to all of our members that participated in our survey. Your responses will help to shape our upcoming year's topics.

The Golden Spoon Award

As we get set for the upcoming year, keep your sights towards the end of the season to enter the Prestigious Golden Spoon Award honey competition, held in our member appreciation meeting in November. See our past winner on our brand new award plaque as you enter our member meetings.

Meyer Bees Bee Packages

3 pound bee packages with a queen are available starting at \$130 through Meyer Bees. Multiple races are available: Italian, Carnoliain, Russian, Saskatraz. Nuc and queens are also available. The Meyer Bees beekeeping supply showroom in Minooka is open 6 days a week, Monday through Saturday. For details please contact WillBees member Dave Meyer: dave@meyerbees.com, or 815-521-9116 or visit their website at meyerbees.com.

Don't forget to register your hives for free with the Illinois Department of Agriculture. https://www2.illinois.gov/sites/agr/Insects/Bees/Documents/beekeep.pdf

Swap Meet

Let's all start going through our existing equipment and think about donating it to new beekeepers. Items may be things you originally may have used and replaced or have more than you need. At a future meeting we will all bring these items and raffle things off. More details in the future. We could use a captain for this project. Please reach out to the board if you can help.

Share what you know

We are looking for people to help contribute to your monthly newsletter:

- Feature articles that you'd like to write
- · Review of a book or article in a journal you read
- An educational opportunity that you are aware of
- Pictures that you'd like us to share
- Recipe using honey you would like to share

Please email willbees-board@willbees.org with anything you'd like to share today.

BOARD MEMBERS

Patrick Schab, President
Dennis Wisnosky, Vice President
Susan Gregory, Treasurer
Fran Miller, Secretary

DIRECTORS (years remaining on term):

Keith Meiser (3)

Dave Meyer (1)

Jim Moleski (2)