

# October 2022

## BROWN COUNTY BEEKEEPERS NEWSLETTER



Mission: We are dedicated to promoting sustainable, responsible and healthy beekeeping practices in Northeastern Wisconsin for both experienced and first time beekeepers. We strive to create a fun environment where learning opportunities exist for association members and the public.

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

### PRESIDENT'S MESSAGE

Fall is here. I am hopeful our beekeepers have monitored and treated for mites, removed queen excluders and honey supers and have provided supplemental feeding if required to get your hives to the 100-120 pounds of honey target. Seems like yesterday when we installed our bees. The bee calendar goes by quickly. It's been an interesting year of challenges with queens and laying workers, but every year I research and learn a bit more.

Next year we have some interesting education that we are working to line up. We have a Dr. Ellis Queen Events presentation and a request on California Almond Pollination. Looking to do Spring and Fall Management and this year we will also do Mite Management and spend some time reviewing treatments. We will also do one or more At the Hive Inspections. What other topics might you want to see next year? Send me a text at 920-370-5281 and let me know your thoughts on these and other topics? The club has matched last year's membership numbers and to keep the momentum going we need your input.

Thanks  
Dave Elsen  
President, Brown County Beekeepers Association

Monthly Club Meeting.

Wednesday, October 19, 2022

6:30 pm

In Person: Green Bay Botanical Gardens

No MBM but treats and networking  
are great!

# A Couple of notes

## "Pot of Gold"

**The Walworth County Beekeepers** will be hosting Dr. Meghan Milbrath (via Zoom) on Tuesday, October 18th at 7:00 pm. She will be sharing her "Pot of Gold" presentation which discusses comb production and storage. Zoom details will be sent out either Sunday the 16th or Monday the 17th.

**Annual Elections:** We will be holding our annual elections at the October club meeting. If you are interested in any of the officer positions, please contact either the nomination committee (Sarah Mueller) or a current officer.

## Interesting Honey Bee Facts!

- The science of beekeeping is called "apiculture".
- In 1984, honeybees on a space shuttle constructed a honeycomb in zero gravity.
- Primitive hives were made from earthenware, mud, or hollow logs.
- Bees are sold by the pound.
- Swarming occurs when a colony has outgrown its current hive and is preparing to separate into 2 or more new, smaller hives.

## "Bee"ing Funny"

What would you get if you  
crossed a bee with a doorbell?  
See following page(s) for answer!



SITES MANAGED BY  
BCBA

Brown County Beekeepers  
updates on club happenings

Northeast WI Beekeepers  
beekeepers helping beekeepers

# 2022 Education Calendar

Date	Education	Type	Presenter
January 19, 22	Success Factors in Beekeeping	Reg	Kelly Kulhanek, Ph. D. Washington State University Sean Melvin
February 18, 22	Queen Rearing	Reg	Augie Linskens Linskens Honey Apiaries, LLC
March 18, 22	Spring Management	Reg	Dave Elsen Julie Mazzoleni
April, 20, 22	Oxalic Acid Mite Treatment Hive Health, What an Inspector looks for MBM (5:45) - Bee nucs and package installation (in-person only)	Reg	Dick Sturm, Julie Mazzoleni, Carl Fisher Wisconsin State Inspector Wayne Steigelman
May 18, 22	MBM - Powdered Sugar Roll Mite Check Demonstration	MBM	Duane and Becky Oudenhoven
	Beginning Beekeeping	Reg	Chelsea Cook, Ph. D. Marquette University
June 14, 22 (Special Date)	MBM - Hive Inspection	MBM	Julie Mazzoleni and Chris Groth
	Sustainable Beekeeping	Reg	Dr. Jamie Ellis University of Florida
July 13, 22	Club Picnic		
August 17, 22	Honey Extraction Fall Management	MBM Reg	James Arvey Chris Groth
September 21, 22	Swarm Catching	Reg	Dave Elsen, Wayne Steigelman
October 19, 22	Beekeeping Q&A Panel	Reg	Wayne Steigelman
November 16, 22	Bee Related Products	Reg	
December (no meeting)			

# September Club Education

**Dave Elsen -  
September  
Education**

**Capturing Swarms**



**Tom Cashman and  
Bob Michiels  
GB Botanical  
Gardens  
Fall Festival**



**"Bee"ing Funny"**



**A Hum-dinger!**



# October

## What's going on in the World of Bees

### Seasonal conditions

In Brown County, Wisconsin

Average high - 56, low temperature - 42

Average Precipitation – 4.4 inches

Average Snow Days– 0

### In the hive

- There is little to no egg laying in October. Drone populations dwindle and any drones that remain in the hive are kicked out by their sisters. Bees tend to form their winter cluster at around 50°F, usually starting in the middle of the month. On warm days, the bees venture out looking for food and may rob unprotected hives.

### Inspection

- The weather may be too cold for extended inspections. It will also be difficult to correct any problems this late in the season.

### Nutrition

- A full-sized colony should have at least 70-90 pounds of honey to eat by the beginning of October, or more than one full deep. Nucs of course need less. Estimate the weight by slightly tipping and hefting the hive. If you extract honey, leave enough for the bees or feed them sugar syrup to make up for the difference.
- If you feed the bees sugar syrup, it should be a 2:1 ratio, thicker than the spring feed; the bees can evaporate the excess moisture from the hive faster from this thicker syrup.
- The bees will need at least two double-sided frames of pollen/bee bread by late winter/early spring. It is better to feed protein earlier in the season, although you can do so in late winter/early spring if necessary.
- Do not feed pollen or pollen substitute for the remainder of autumn, as bees use the reduction in pollen flow as a cue to continue rearing winter bees.

- Continued next page



# October

## What's going on in the World of Bees

### Pests, parasites, and diseases

- At this point in the year, if you find three or more mites per 100 bees...from a sugar shake, ether roll, or alcohol wash, you will want to treat. Treatment methods will depend on your management goals, the condition of the colony, and external conditions.
- Treatments that are most effective when there is no brood present are good options now.
- Always remove chemical Varroa mite treatments according to label directions, but make sure none remain in the hives before you winterize them.
- Carefully check every brood frame in each colony for American foulbrood infection.
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### Equipment

- Winter preparation should continue: remove extra supers and queen excluders, secure the hive cover with a rock or straps, add a mouse guard (after confirming that a mouse has not yet moved in), and add an entrance reducer (if it is not already in place). Consider raising the hive up off the ground, if it is not already. Remove any supers that have not been filled.
- You may insulate the hive, but be sure foremost to avoid moisture build-up in the hives. Cold is less of a problem for bees than condensation. Since much of the heat escapes out of the top of the hive, some beekeepers add a super with an insulating, absorbent material (e.g., dry leaves, wood chips). Others wrap the hives in black tar paper or similar materials.
- Leave an upper entrance open for the exhaust of moisture.
- Tilt the hives forward a few degrees so that any moisture that does accumulate can drain out the bottom entrance.

### Yard maintenance

- Consider moving your hives to sunny winter yards. They can be crowded in these yards, since they will not be foraging.
- Be sure that these yards and the spring/summer yards will be accessible in mud season (early spring).
- Consider setting up a wind break near the hives.

# CLUB AND BEEKEEPING HISTORY

AND OTHER INTERESTING STORIES/TIDBITS

## A once obscure method of beekeeping could save colonies!

Honeybee colonies have been dying more frequently in recent years than they used to, in large part because of a phenomenon commonly known as colony collapse disorder. Parasites and the stresses caused by commercial beekeeping practices have contributed to the problem, according to Thomas D. Seeley, a retired Cornell University professor who studies the behavior and social life of honeybees.

"It used to be a beekeeper would expect to lose 10 to 20 percent of colonies in a year, mostly over the winter," he says. "And now the colony mortality can be 80 percent."

Bees have been around for about 120 million years, though, says Brenda Kiessling, a retired physician and an Eastern Apicultural Society of North America-certified master beekeeper living in Vienna, Va. They have proven themselves capable of adjusting to changing conditions. "They have survived on their own and they have had to adapt," says Kiessling, who has been caring for honeybees since the early 1970s. "They've lived through ice ages, rainstorms. Somehow they have survived."

That knowledge has led Seeley, along with Kiessling and other researchers and amateur beekeepers, to embrace Darwinian beekeeping over the past decade. Once a niche practice, it is becoming more popular with hobbyists. It focuses on creating optimal conditions for bees to make honey, while also mimicking how *Apis mellifera* lives in the wild. That means housing colonies in small hives that replicate the size of a natural nest cavity, spacing hives far apart to prevent the spread of parasites from one colony to another, and positioning them far from areas treated with insecticides.

Seeley addresses the subject in the last chapter of his book "The Lives of Bees: The Untold Story of the Honey Bee in the Wild." The term "Darwinian beekeeping" is a nod to Charles Darwin's principle that natural selection over time gives species the ability to survive and reproduce.

"If you let an animal live naturally, it is able to use its full toolbox and set of skills to survive and reproduce," says Seeley, who has been studying honeybees in the wild in the Arnot Forest outside of Ithaca, N.Y. "But when you take any kind of animal and you force it to live in a different way, those tools aren't allowed to function very well."

# A once obscure method of beekeeping could save colonies!

The practice addresses several of the causes behind colony collapse. A parasite called the Varroa mite, which isn't native to the honeybee species in the United States, is infecting them with deformed wing virus. The mite can attack honeybees when they are developing. "They come out with shriveled wings, and they are pretty helpless and hopeless," Seeley says.

Combating the virus starts with getting bees that have good genes, Seeley says. "What hobby beekeepers are taught is you get your hive in the winter and nail it together and paint it. And then in the spring, you order a package of bees from Florida or Georgia, and those bees are just junk," Seeley says.

In the commercial queen production industry, queen honeybees are produced on a large scale, bred for large colony size and high honey production, but they aren't usually resistant to mites. In the wild, by contrast, adult worker bees (the queen's daughters) have evolved to kill Varroa mites by biting off their legs. This adaptation is preferable to using miticides to kill the parasite. "Let the bees show you which ones can survive," Seeley says.

To get mite-resistant honeybees, Seeley says, beekeepers can capture a wild swarm by putting out bait hives in remote places, far from colonies kept by beekeepers. In spring, when the hive gets too crowded, the queen and half the colony will swarm, or leave the colony to find a new home. Kiessling recommends capturing the swarm while they are hanging out on a tree branch or bush. It can be days or just minutes that they are waiting there, looking for a new home, so you must work fast.

"You're lucky if [the swarm is] on a low branch," she says. "You can just put your garbage can underneath it and shake them into it." Other times, swarm retrieval can be more precarious and can involve climbing a tree and cutting down a branch.

In the end, you want to raise a colony with a good queen that can survive winters. Without a queen, a colony can't survive for long; she lays the eggs to produce the bees in the colony.

During Kiessling's first winter trying her hand at Darwinian beekeeping, only one of her colonies survived, so she took the queen out of the colony, so it could refresh. She moved the queen to a new hive to start an additional colony. Another winter passed, and the queen's colony survived, so again, Kiessling found the queen and removed her to start a new colony.

Colony mortality also stems from the stresses that come with migratory beekeeping. Commercial honeybee colonies are trucked around the country, including to the Central Valley of California to pollinate almond fields, where they are overcrowded and exposed to pesticides. "They're moved into a slum-like situation, and it's a wonderful place for the Varroa parasite to move from highly infected colonies to other colonies and infect them," Seeley says.

Hobbyists have long modeled their ways after the practices of commercial beekeeping, such as housing bees in large hives close to other colonies, to maximize honey production. Seeley is seeing a shift in that mind-set, though.

# A once obscure method of beekeeping could save colonies!

“There’s an admiration for [commercial beekeepers], that they can manage so many, but there is this growing interest in hobby beekeepers for a kinder and gentler beekeeping,” Seeley says. “This approach is to be kind and respectful of the way they are adapted to live and allow them to live naturally, and thus let them use their survival tools.”

To do this, you must mimic their natural environment. For example, space out hives to prevent bees from drifting from one colony to another and to reduce the spread of disease. In nature, wild colonies are typically around 3/5 of a mile apart, but in a hobbyist’s backyard, spacing hives great distances poses a challenge.

“That’s unrealistic for most beekeepers, unless you live in a rural place,” Seeley says. In a suburban setting, Seeley recommends having just one or two hives, with at least 100 feet between colonies.

“You do the best you can,” says Kiessling, who spaces her hives about 300 to 600 feet apart.

Other steps include roughening the interior walls of the hive by scratching the wood with a rasp or building the hive with rough-sawn lumber to encourage the production of propolis, a mixture of resins, beeswax and other materials made by the bees that boosts the colony’s ability to fight bacterial and fungal infections. And use hives built from thick, insulated lumber placed high off the ground. Position them far from plants treated with insecticides and fungicides, and near wetlands, forests and fields, where they can gather different kinds of pollen and have access to clean water.

Also house colonies in small hives that mimic the size of a natural nest cavity. That way, the colony becomes overcrowded in spring, forcing bees to swarm, which creates a chain of beneficial effects: For a few weeks, the colony doesn’t have young bees that the Varroa mite can infect, and the colony can refresh itself, creating a new queen.

“Rejoice when they swarm, and don’t think of it as a setback,” Seeley says. “In most beekeeping, historically, that would be a failure. You are losing your workforce and honey crop. Be satisfied with a small crop of honey.”

# Brown County Beekeeping Association

## Member Benefits



### **Club Sponsor – Hansen Honey Farm, Rhinelander, WI**

- 15% Discount for all first time purchases
- 5% discount for all BCBA members for ongoing purchase
- When purchasing in-store only, let them know you are a member of the BCBA.

### **Club Sponsor – Let It Bee, Inc., Greenville, WI**

- 15% Discount for all first-time purchases
- 5% discount for all BCBA members for ongoing purchase
- When purchasing in-store only, let them know you are a member of the BCBA.

### **Club Sponsor Website Page**

### **Club Equipment Rental**

Includes Honey Extraction equipment and other items. See website for full list.

### **American Bee Journal Subscriptions**

(Contact Club Treasurer for Discount form)

### **Past Newsletters & Meeting Minutes**

### **Club Education Reimbursement Opportunity**

Club members are eligible for up to \$25/ calendar year for continuing education

#### *Eligibility Guidelines:*

- Must be a current member for at least 12 consecutive months.
- Member must submit their request to the Leadership Team prior to the event including details on how it aligns to the Club's Mission.
- Note: BCBA sponsored events, books or magazines not eligible for reimbursements.
- Club Expectations of Members Receiving Education Reimbursement
- Overview of the education to the club or an education session.
- Write-up with photos and/or video for club publication.

## Club Officers

### **President: Dave Elsen**

president@browncountybeekeepers.com

### **Vice President: Julie Mazolleni**

vicepresident@browncountybeekeepers.com

### **Secretary: Bob Michiels**

secretary@browncountybeekeepers.com

### **Social Media: Carl Fisher & Wayne Steigelman**

info@browncountybeekeepers.com

### **Treasurer: Tom Cashman**

Tcash99930@aol.com

### **Board Member at Large: Dick Sturm**

### **Membership Chair: OPEN**

### **Education Chair: OPEN**