April 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

PRESIDENT'S MESSAGE

This is an exciting time for beekeepers. Hives that successfully winterered are starting to build some brood and soon will be out and foraging for early nectar and pollen. Packages will arrive in late April or early May. Time to get your bee yard, equipment, spring feed and mite management plan supplies ready for the upcoming season. I also use this time of year to participate in some education. I particularly enjoy Two Bees in a Podcast and the Beekeeping Today Podcast to pick up some ideas and keep up with what's new in beekeeping.

This year the club will be conducting several children and adult honeybee and pollinating educational events. If you are interested in participating in any of these events, let us know.

Hope to see you at the April meeting. The education by Dick and Carl will discuss Oxalic Acid as a tool in a Mite Management Program. And as a bonus, we will be having a "meeting before the meeting" (MBM) on bee nuc and package installations! Starts at 5:45 at the Botanical Gardens (In-person only). Thanks,

Dave Elsen Brown County Beekeepers Association President

Monthly Club Meeting Wednesday, April 20, 2022 6:30 pm In Person: Green Bay Botanical Garden Virtual: <u>Here's the link</u> Meeting ID: 854 1624 3350 Passcode: 186750

Coffee and Bees Tuesday, April 12, 2022 8:00 am Luna Coffee Roasters Bellevue Off of GV on Monroe

Interesting Honey Bee Facts

- The Magna Carta legalized the harvesting of wild honey by common folk. Year 1215, 807 years ago!
- A hive will collect approximately 66 pounds of pollen per year.
- A worker bee can carry a load of nectar or pollen equal to 80% of her own body weight.
- Up until the mid-1700's in England, it was common practice to kill all of the bees in a hive during honey collection.





Bee"ing Funny"

What do you call a bee with messy hair???? 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	Туре	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 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
May 18, 22	Beginning Beekeeping	Reg	Chelsa Cook, Ph. D. Marquette University
June 14, 22 (Special Date)	TBD	Reg	Dr. Jamie Ellis University of Florida
July 20, 22	TBD		
August 17, 22	Honey Extraction Over Wintering Hives	MBM Reg	TBD
September 21, 22	TBD		
October 19, 22	TBD		
November 16, 22	TBD		
December (no meeting)			

Last Month's Education

March Education

Dave Elsen Spring Management



Duane Oudenhoven Beekeeping Experiences



Wayne Stiegelman BCBA Sticker

Meanings behind the words Wisconsin, Educate, Sustainable, Engage and Responsible







A Frizz-bee!



April What's going on in the World of Bees

Seasonal conditions

In Brown County, Wisconsin Average high - 46, low temperature - 36 Average Precipitation – 3.1 inches Average Snow Days– 5



In the hive

• On cold days, the bees are still clustered, but on warm sunny days, they should be bringing in lots of pollen and nectar. If their flights are limited by cold or inclement weather, they may still be at risk of starvation. The colony, if big enough, begins to rear drones in greater numbers.

Inspection

- On the warmest days, you can quickly inspect a colony's brood pattern and food stores, taking care not to chill the brood.
- If the bottom brood chamber is empty, move it to the top of the brood nest. Doing so before a day or two of warm temperatures will help brood survive the move.
- After installing a new package or nuc, allow two weeks for the colony to establish before an inspection.

Nutrition

- The colony should have at least 3-4 combs full of honey. Feed them if the colony is light or the stores obviously empty. Feed them if the hive is light or the stores obviously empty, or if the bees are visible through the inner cover at the very top of the hive. Use dry sugar or a candy board, or replace empty combs with combs of capped honey. Sugar syrup is also an option: feed a 1:1 mix in a feeder that holds enough syrup that it doesn't need refilling every day, but not so much that it gets moldy before the bees finish it. If the bees are reliant on this food, you will likely need to continue to feed until nectar and pollen are accessible outside.
- The location/proximity of the bees to their food stores is key. If the cluster is far to one side of the food stores, you can carefully move it closer, keeping it together while you do so, or move frames of honey closer to it.
- You might consider feeding pollen substitute or supplement to support or further stimulate egg laying. If you do so, be sure to use clean pollen.
- Feed package bees or nucs upon their arrival.
- If you plan to rear queens this year, lavishly feed the cell finisher colony chosen in the fall lavishly (carbohydrates and protein) for early spring buildup.



April What's going on in the World of Bees

Pests, parasites, and diseases

- Begin monthly monitoring for Varroa mites. At this point in the year, if you find two 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. This is an ideal time to use treatments that cannot be used when supers are present.
- If drones are being reared in significant numbers, you can use drone comb for early Varroa management, but be sure to return within 28 days at a minimum, to ensure that it doesn't become a haven for mites!
- Carefully check every brood frame in each colony for an American foulbrood infection.
- Cleaning dead bees and detritus off the bottom board during the first thorough inspection may help keep the hive disease- and pest-free.

Population management

- Install any new packages or nucs that arrive.
- Equalizing can be accomplished through donating a frame or two of brood from one hive to another or swapping hive locations.
- If your inspection reveals that a queen is under-performing, if you want the vigor of a young queen, or if you want to introduce new stock for hygienic behavior or other traits, you might consider re-queening. This is a good month to do it, although local queens are probably in short supply this early in the year.
- To rear queens yourself this year, continue to build your cell builder colony while preventing it from swarming. Check often for swarm cells, and cut out any you find.

Equipment

- Remove insulation, winter wraps, mouse guards, etc. Entrance reducers can be left on; many beekeepers use them year-round.
- Yard maintenance
- Check that any bear fencing is still working properly and replace batteries if necessary.

Education

• In the event that some colonies did not survive the winter, this is a good time of year to diagnose dead-outs and learn from your mistakes.

CLUB AND BEEKEEPING HISTORY

And other interesting stories/tidbits



US beekeepers continue to report high colony loss rates, no clear progression toward improvement

Beekeepers across the United States lost 45.5% of their managed honey bee colonies from April 2020 to April 2021, according to preliminary results of the 15th annual nationwide survey conducted by the nonprofit Bee Informed Partnership, or BIP.

These losses mark the second highest loss rate the survey has recorded since it began in 2006 (6.1 percentage points higher than the average annual loss rate of 39.4%). The survey results highlight the continuing high rates of honey bee colony turnover. The high loss rate was driven by both elevated summer and winter losses this year, with no clear progression toward improvement for beekeepers and their colonies. BIP hopes to use the survey results to better understand how colony losses are experienced by beekeepers, and what can be done to reduce losses in future seasons.

Since beekeepers began noticing higher losses in their colonies in the early 2000s, agricultural agencies, researchers, and the beekeeping industry have been working together to understand why and develop best management practices to reduce their losses. The BIP annual colony loss survey, which has been conducted since 2006, has been integral to that process.

"This year's survey results show that colony losses are still high," said Nathalie Steinhauer, BIP's science coordinator and a postdoctoral researcher in the University of Maryland Department of Entomology. "Not all beekeepers are affected at the same intensity, but the turnover rate of colonies is still overall higher than beekeepers deem acceptable [normal or acceptable turnover is defined at about 20%]. We should remember, however, that loss rates are not the same as population decline. The recent numbers of honey bee colonies in the U.S. are relatively stable despite those high losses, but that's because beekeepers invest a lot of time and effort to increase their operation size to mitigate their losses."

Commercial honey bee operations are essential to agricultural production in the U.S., pollinating \$15 billion worth of food crops each year. Honey bee colonies are moved around the country to pollinate important agricultural crops such as almonds, blueberries, and apples. Minimizing their losses and ensuring the health of both commercial and backyard colonies is critical to food production and supply.

"Beekeepers of all types consistently lose a high number of colonies each year, which puts a heavy burden on many of them to recoup those losses in time for major pollination events like California almonds," said Geoffrey Williams, assistant professor of entomology at Auburn University and co-author of the survey. "Colony losses remain elevated, and this year's annual and summer loss rates are among the highest recorded."

This past year, winter losses were reported at 32.2%, which is 9.6 percentage points higher than last year and 3.9 points higher than the survey average. Summer losses were some of the highest ever reported again this year at 31.1%, which is 0.9 percentage points lower than last year, but 8.6 points higher than the survey average.

The survey asks beekeeping operations of all sizes to track the survival or turnover rates of their honey bee colonies. This year, 3,347 beekeepers managing 192,384 colonies across the country responded to the survey, representing about 7% of the nation's estimated 2.71 million managed colonies. This effort helps to keep a finger on the pulse of what is going on with beekeepers to identify why high losses are persisting.

"Though we see fluctuations from year to year, the worrisome part is we see no progression towards a reduction of losses," said Steinhauer.

"The long-term efforts of the BIP's annual survey are so important to monitoring honey bee colony losses and beekeeper management over time, and hopefully to identifying key practices that are protective for colonies," said Williams. "Because of the close connection of honey bees to the environment, the survey's long-term data may lend itself to insights into how changes in land-use and weather impact the beekeeping industry, too. These are really understudied areas at the moment."

This year, to get a better understanding of different management practices that may lead to loss fluctuations, the BIP team delivered two versions of the survey to cater to different beekeepers. The two surveys found that backyard (managing 50 or fewer colonies) and sideliner (managing 51-500 colonies) beekeeping operations face both similar and distinct challenges to commercial beekeepers managing more than 500 colonies. While parasitic varroa mites continue to be a major issue for beekeepers regardless of operation size, queen management might be a factor that can lead to variation in seasonal colony losses.

"A colony needs a healthy, fully functioning queen before major pollination events to be productive," said Williams. "A preliminary look into survey data reveals that commercial beekeepers almost always replace old queens with new ones during the summer, whereas only about half of backyard beekeepers do. Could this explain why commercial beekeepers lose fewer colonies in the subsequent winter than backyard beekeepers? Perhaps, but we need to dig deeper and possibly perform experiments to shed more light on this." While the survey suggests that beekeepers are remaining responsive to the current best management practices and health concerns of their colonies, the loss data shows little progress.

"We see in the survey signs that beekeepers are adjusting their practices over time," said Steinhauer. "We also see that their perception of risk is changing. The level of acceptable loss, which was originally around 15% in earlier years of the survey, has crept up to 23% this year. So that tells us beekeepers are thinking about those factors that affect honey bee health more actively. We also see some beneficial changes in agricultural practices that could affect honey bee health, like changes in spray recommendations. But there are still a lot of issues that are left unaddressed. It seems we're running to stand still because beekeepers are changing their practices, and yet we still don't see a clear improvement in their loss rates."

BIP stresses that the lack of improvement in losses is a clear call for more attention and efforts to be paid on finding solutions, especially concerning varroa mites. The BIP annual loss survey continues to be an important part of documenting the data necessary to drive future research, best management practice recommendations, and support for honey bee health.

"We hope to continue BIP's survey effort to record colony losses experienced by U.S. beekeepers and explore beekeepers' management practices," said Steinhauer. "We have a general idea of what practices are associated with higher success, but the devil is in the details, and we need to understand why the implementation of some practices are more successful in some cases than others. Of course beekeepers also need the support of the public and political sectors. We need to recreate environments that are conducive to healthy bees, and that will benefit both honey bees and native bees or other wild pollinators."

The survey is conducted by the Bee Informed Partnership with data collected and analyzed by the University of Maryland and Auburn University. Survey results are available on the Bee Informed Partnership website, with a summary provided below.

Winter loss estimates:

- Oct. 1, 2020-April 1, 2021: 32.2% losses
- 9.6 percentage points higher than winter 2019-2020: 22.6%
- 3.9 percentage points higher than average winter loss (2006-2021): 28.3%

Summer loss estimates:

- April 1, 2020-Oct. 1, 2020: 31.1% losses
- 0.9 percentage points lower than summer 2019: 32.1%
- 8.6 percentage points higher than average summer loss (2010-2020): 22.8%

Total annual loss estimates:

- April 1, 2020-April 1, 2021: 45.5% losses
- 1.8 percentage points higher than 2019-2020: 43.7%
- 6.1 percentage points higher than average annual loss (2010-2021): 39.4%

Loss comparison by beekeeper category:

- Backyardbeekeepers(manage50orfewercolonies):27.0%summervs.42.0%winterlosses
- Sideliner (manage 51-500 colonies): 19.5% summer vs. 31.9% winter losses
- Commercial (manage more than 500 colonies): 30.9% summer vs. 32.9% winter losses

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

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 Treasurer: Tom Cashman Tcash99930@aol.com

Board Member at Large: Dick Sturm

Membership Chair: OPEN

Education Chair: OPEN

Social Media: Carl Fisher & Wayne Steigelman info@browncountybeekeepers.com