



'Tis the season—where we can't do much with our bees except wonder and worry how they're doing. Hopefully your mite counts were well under control going into mitten weather, and your little darlings are appropriately tucked in for a long winter's torpor.

While they're in decreased activity, there's plenty of things going on with beekeepers, as highlighted in this newsletter. Some things to look for below:

- Ideas for what your beekeeper might want to find in their stocking, based on a random survey of beekeepers and what they never want to be without in the apiary
- Part 2 of Steve Tillman's article on Manuka honey
- News from the district reps
- An overview of the fall conference
- And a few other things ... you'll have to scroll to find them!

Thanks for clicking on this email in the midst of all the holiday best-deals-ever emails flooding your inbox.

Also, thanks for your support of the Michigan Beekeeper's Association, and pollinators. We welcome your suggestions, cut-out stories and photos of snowy apiaries and horrendous bee sting reactions.:)

Charlotte Hubbard, Newsletter Collaborator-Editor, mibeeseditor@gmail.com

## **Fall Meeting Overview**

by Charlotte Hubbard, mibeeseditor@gmail.com

The annual fall meeting was held October 27 in Clare, Michigan – a location selected to attract more mid- and upper-state beekeepers. The MBA will continue to move meeting locations to different geographic locations, hopefully making it convenient for all beekeepers to attend, at some point.

In a format change, the conference was only one day, in one large room, with only one presentation occurring at a time. I personally appreciated the changed format—successful beekeeping can seem like a solitary challenge at times, and seeing a room full of people interested in learning about how to better manage this critical pollinator was reassuring.

The key note speaker was the ENERGETIC and very knowledgeable Dr. Kim Skyrm Ph.D., Massachusetts Apiary Program Coordinator. Dr. Skyrm enthralled us with an overview of their work in Massachusetts (the state



apiarists take calls from beekeepers, and once paid a visit to Tom Brady's bees), and encouraged us all in the ongoing, necessary fight against Varroa.

Michigan's own Dr. Meghan Milbrath provided an update on the many initiatives underway for pollinators; watch for a review of that work in future issues.

Dr. Zachary Huang overviewed some of the work in his labs, including the fascinating concept of robotically raising bees ... and the challenge of feeding larvae an average of 10,000 times each.

Mike Hansen, Michigan Apiary Inspector / MDARD, talked about several programs and initiatives. He encouraged us to send samples to the Beltsville Lab (free!) as we find issues with our colonies. Mike also shared this list of some of his favorite resources:

https://articles.extension.org/bee\_health https://www.michigan.gov/righttofarm https://www.projectapism.org/ https://beeinformed.org/ http://agdev.anr.udel.edu/maarec/ https://www.abfnet.org/ https://www.ahpanet.com/ https://apiaryinspectors.org/ http://aapa.cy berbee.net/ http://www.capabees.com/ www.ento.psu.edu/pollinators https://pollinators.msu.edu/

Concurrent to the meeting were vendors in the adjacent hallway, who deserve a special salute for this and every conference for making it easy to obtain what we need (along with things we didn't even realize we needed! If I buy any more bee earrings, I'm going to have to get more ears.)

Another special salute goes to Chris Beck, Chairperson and Norm Adams, Judge, for the honey and wax competition. These photographs are just a few. For more photographs and another overview of the meeting, check out this <u>Clare newspaper</u> article.

As Chris Beck (featured in the article) noted "some of the quotes are accurate." Having been on both sides interviews in my career as a writer, inaccurate reporting is unfortunately part of it, especially for no- or low-paid writers, especially for content that is not well-understood (like bees, who are not well-understood even by many of us beekeepers.)

A business meeting, officiated by Sheldon Schwitek, MBA president, concluded the day's activities. Notably:

- On bee-half of the MBA, Sheldon thanked Ann Leonard, outgoing MBA vice-president, for her many years of service to the MBA. SALUTE ANN!!
- Each district's Beekeeper of the Year was also announced—I'll feature more on these winners in upcoming issues as well as this one.











Left: Chris Beck, kneeling, and Norm Adams review entries. There were 40 entries in liquid and creamed honey, and wax blocks and artistic wax.

Special thanks to Nancy Bristol and Chris for the photos.

#### "I don't go without this ..."

by Charlotte Hubbard, mibeeseditor@gmail.com



I asked a variety of beekeepers what they never want to be in the apiary without, and received varied, interesting answers. I'd love to know yours also and will share them in future issues. Please email me your thoughts. Thanks - Charlotte

**Sorry** to be contrary, but the favorite "tool" in my tool kit, is another beekeeper. Just seems like whenever I have a beekeeping issue, they are eager to pass on their insights or sometimes... the lack of any. These "tools" come in all shapes, sizes, ages, sexes, and some may even be disguised aliens, but they all play their helpful part. As much as I love my hive tool, given a choice, I would give it up for the other beekeeper every time.

Joel Lantz

I always bring a 5-frame cardboard nuc box to the yard with me. Having frames available to swap, being able to make an unplanned split and move it, catch a swarm, hold a queen are just some of the uses that allow flexibility for on the spot corrective actions.

Chris Beck

A properly lit smoker.

Larry Connor, PhD

My favorite piece of bee equipment is fast becoming the polystyrene hives. I've been adding one or two to my collection every year for the past several years, especially in public or corporate locations where it's been embarrassing to explain "Why did our bees die AGAIN?" Bees in polystyrene seem to have less stress and can maintain both hot and cold temps much more efficiently. Opening them up in March and seeing every one moving around the whole hive is a huge relief. We consistently only loose 25% of our polystyrene, or Finn hives, as we call them, which is not great but way better then the 50-60% loss we've been seeing. So far the only major downside is ants, they love them and burrow right in.

Rich Wieske

My Honda Four Wheeler: it gets me back to the bees when my truck would bury itself. I've taken spring feeding, supers, and one year even packages to the bee yard on my Honda. It is by no means new, but it always starts and always get me there with the cargo and always gets me home.

Norm Adams

Honestly, I don't really have anything, because I kind of like to be minimalist about my beekeeping - except for my truck. I never like to go into the yard without my F350, with the 7.3 diesel engine and custom aluminum flat bed with lift gate. I also like my 5-gallon metal fuel bucket Cathy King gave me—my "sitting bucket." It keeps my smoker fuel dry in case it has rained, and I can't find anything on site, and I can sit on it to protect my back when inspecting the brood nest or looking for queens.

Meghan Milbrath, PhD



It's an old 5-gallon bucket with an old Folgers coffee can bolted to the side of it. The big bucket holds my cedar chips and sumac (fuel), an old telephone book, that I rip two pages from to start my smoker, and my smoker too—if I don't overfill my bucket with the cedar chips.

In the coffee can are two hive tools, two pharmacy pill bottles that stick matches fit into perfectly, an empty queen cage, and another pill bottle with miniature marshmallows, in case I find a two-queen hive. Oh, a bee brush is in the big bucket too, partially buried by the chips, I don't hardly ever use a bee brush, I use my gloved hand.

I usually keep my gloves in the bucket too.

Chuck Bauer

My Kent Williams hive tool, and it is hard to find the original anymore. The widely available knock-off is second-best, but I'll take it over other style hive tools.

Charlotte Hubbard



One of my favorite tools is the one-handed queen catcher from Mann Lake. I find easy to use even with gloves on and feel more in control of maneuvering as not to squash her. It's also a great tool for marking, with a foam plunger that also has a stopper in place to help avoid injury during marking. I personally see it as great asset to the toolbox.

John Davis

I love my Bernzomatic ts 4000 Propane Torch. It's \$36 and is one of my most frequently used tools. Of course it lights my smoker immediately. (I use wood pellets which require a torch to ignite. The pellets will smoke / smolder for five hours.) But, I have several other uses for it. Does your smoker lid ever get stuck shut? It's because the tannin in the smoker fuel melts then hardens around the inside of the lid. When I run my torch flame around it for five seconds, it loosens the cap up and it opens freely.

When my bees propolize the holes on my feeding jar lids, a quick shot with the torch melts the

propolis immediately. It also helps me to open jar lid that is stuck closed.

A quick shot with the torch ensures that the ant eggs under my inner cover will not continue to be a problem.

I use it to clean off my metal queen excluders when they get propolized.

It also enables me to quickly and effectively disinfect my hive tool before I use it on another hive.

Dave Pearce

# Beekeeping In New Zealand The Manuka Honey Story, Part 2

By Steve Tilmann



#### HOW MANUKA HONEY CAME TO BE

Up to this point I had learned a little about why manuka honey was so popular. And a bit about the history of manuka honey from the beekeeper's perspective. What I didn't know — and what blew my bee veil completely away — was how the New Zealand beekeepers took the hand that was dealt them and turned it around into such a successful, winning proposition.

(On the left: ajar of manuka honey. Note the UMF rating of "5+" on the label, the lowest of the manuka grades. This jar was selling for over \$80 (USD) a pound.)

It all started back in the early 1990s when a small group of beekeepers got together and decided to try and do something about this curse called manuka honey. Truth be told, I strongly suspect that it originally started with a single beekeeper; these types of things usually do.

They pooled their money, hired a marketing guy, and turned him loose on the problem. In the course of his research, the marketing guy ran across an obscure academic paper, published by a professor at Waikato University (in New Zealand), that compared various honeys for their antimicrobial properties. Manuka honey, the professor found, was off the scale.

The marketing guy took this tidbit of information back to the beekeepers and they decided that may be this was an angle worth pursuing. And the rest, as the proverbial saying goes, is history.

#### THE PROBLEMS WITH MANUKA HONEY

But there were still some problems about manuka honey that had to be solved. One of the main ones was how to get the stuff out of the frames and into a barrel.

We already mentioned how manuka honey quickly turns to a gel-like state. It also has the property that when the gel is disturbed, such as by poking it, the honey turns to a more liquid state. This property is called thixotropy. Turns out that manuka honey is not unique in this regard. There is a certain type of heather honey found in the northern Scandinavian countries that is also thixotropic.



The Scandinavian beekeepers, specifically the Norwegians, had solved the problem of extracting thixotropic honey. The key was a device that sort of looks like a big waffle press that has hundreds of small, short nylon fingers on each side of the press that are spaced to fit into the cells of honey comb. The uncapped frame is placed in the press, which the New Zealand beekeepers call a pricker, and the press is closed. The fingers enter the cell, disrupts the gelatinous state of the honey and turns it to a more liquid form. The frame is shifted over a cell and the process is repeated. When all cells have been pricked, the frame is placed in an extractor and the manuka honey is spun out.

What a neat solution to this seemingly intractable problem! The answer was already out there; it just took some looking to find it.

#### THE PROBLEM OF AUTHENTICITY

Another problem the New Zealand beekeepers faced when bringing manuka honey to the market is one of authenticity. How do you know if the honey you are buying is truly manuka honey? After all, if the retail price of manuka can be in the neighborhood of \$200 (USD), or more, per pound, there is plenty of folks out there that wouldn't think twice about printing a honey jar label that says "manuka honey" and cashing in. In fact, I can think of whole countries of beekeepers – particularly in the distribution chain - who would do, and have done, just that.

To solve this problem, the New Zealand beekeepers embarked on a program of branding, quality assurance and traceability of the product. Here is how it works.

First, they formed an association of manuka honey producers called the UMFHA (which stands for Unique Manuka Factor Honey Association). There are over 100 producers and exporters in this Association. To join is no cheap thrill; a beekeeper has to pony up \$35,000 (USD) just to sign up, and that is just be beginning of the fees and assessments. But once in the club, the beekeeper can sell their manuka honey as "true" manuka honey (more on this in a bit). Specifically, there is a brand which can be placed on the label which certifies that the honey is, in fact, really manuka honey.

The trademarked brand is "UMF" and you will see this on any manuka honey product that is marketed through the Association. The UMF brand is always followed by a number, such as 5+, 10+, 15+ etc., that relates to the "purity" of the honey; ie., how much of the nectar was obtained solely from the manuka bush. The higher the number, the more the nectar came from the manuka plant.

But of course, you might say, any one can still print a label that has the letters "UMF10+" and try to sell their product as manuka honey. True enough. So the Association has a whole cadre of "inspectors" who globally seek out manuka-labelled products and ascertain if the honey was, in fact, produced by an Association member. My understanding is that these "inspectors" are quite aggressive in their work.

The manuka honey inspectors prowl the global market looking for unauthorized manuka honey products. This includes shopping the internet; specifically the anything-goes marketplace called eBay and Amazon.

But still, trying to prevent some schmuck printing a honey label with "UMF" on it is sort of like the game of whack-a-mole. When one is shut down here, another pops up over there. A single barrel of high-grade manuka honey can be sold for \$60,000 (USD), or a lot more. And there are some beekeepers would be most happy to sell one or two barrels of honey at that price and then disappear into the woodwork.

So the enforcement actions of the UMFHA specifically focus on the distributors and manufacturers who use manuka honey in their distribution chain or products. If you are a distributor or manufacturer that has shelled out \$60,000, or more, for a barrel of manuka honey, you sure as hell don't want the wrath of the legal dogs from New Zealand descending upon your operation and hauling your sorry butt into court with legitimate and defensible trademark infringement claims. They win; you lose.

There are a lot more unscrupulous beekeepers willing to game the system than there are distributors and manufacturers who buy in bulk. By keeping the buyers of barrels in line, the Association is effectively shutting off the market for counterfeit manuka honey. I would say this is a pretty smart move on the Association's part.

It should be mentioned that there is another numerical rating scale that you might see on manuka honeys.  $MGO^{\text{TM}}$  (note the trademark symbol) is a trademark of Manuka Health New Zealand Ltd. This trademark is followed by a number (eg., 100, 200, 300, etc.) which supposedly also measures manuka honey activity level. The UMF and MGO ratings are not the same. The UMF rating is an industry standard while the MGO rating is company specific. Hey, you can't blame them for trying.

(Editor's Note: more from Steve on this fascinating subject in future issues.)

Bees were hungry this late summer / early fall, taking water and syrup regularly. I had several reports of small hive beetles being bad. (I saw some in my hives but not an alarming number.)

Do what you can to ready your hives for winter.

The Kalamazoo Bee Club's annual bee school is January 26, at KVCC. <u>Click here</u> for more information on a full day of educational offerings; the key note speaker is Dr. Meghan Milbrath.

**District 1 Beekeeper of the Year:** Charlotte Hubbard (more about Charlotte in a 2019 newsletter.)

### District 2 News; Dave Pearce; dpearce007@hotmail.com

We would like to welcome a new bee club to District 2. It is called *The Hidden Lake Bee Club*. Those interested can contact Rollin Lauber (517) 605-1590.

The Ann Arbor Backyard Beekeepers (A2B2) are preparing for their annual Holiday Gala which will be on December 11. There will be a mead tasting, silent auction and a session lead by expert mead maker, Ken Schramm.

In January, the Napoleon Bee Club will be hosting longtime beekeeper, Mel Disselkoen. Mel has spent much of his life developing and teaching his technique of queen rearing called, "The OTS Method" which stands for "On the Spot". It is a great way for beekeepers with at least just a little experience to raise their own queens in their pursuit of healthy, strong and sustainable apiaries. Mel has also authored a book which details his process.

Many in the district report that they are breathing a sigh of relief having gotten their bees settled for winter after a successful beekeeping season.

District 2 Beekeeper of the Year: Dave Pearce (more about Dave in a 2019 newsletter.)

### District 3 News; Rich Wieske: rich@greentoegardens.com



This past summer was one of the driest 'til September. Harvest has been much lower than usual; personally 30% below previous years. Pollen collection was also down early in the season but picked up after July 4th. Mite counts were down all year and only in mid-September - October did we seen counts of 3–15% in samples. With an additional OAV treatment, hives are seemingly looking good for winter.

Our local community colleges keep adding additional honey bee classes with Jim Ford at Macomb County Community College now doing four classes this semester. And not to be out done, Charles Jones is doing several classes at Wayne County Community College

Favorite beekeeping book as a gifting idea? Dewey Caron and Larry Connor's <u>Honey Bee Biology and Beekeeping</u>. Next Tom Seeley's <u>Honey bee Democracy</u> and anything written by Richard Taylor.

Here's a very wonderful photo taken by Tim Mcgee, snapped this past summer at Tollgate farms when one of our student hives swarmed.

**District 3 Beekeeper of the Year:** Sandra Graichen, who is also the President of the Southeastern Michigan Beekeepers Association (SEMBA). This past winter, following the sudden loss of a beloved member of SEMBA's leadership, and struggling to operate with multiple vacant official positions, Sandy stepped up and took the reins. In only a few months, she filled critical committee seats, organized and ran a hugely successful and widely-attended SEMBA spring

conference, and solidified partnerships with educational affiliates like WCCC and MSU. SEMBA's bee school is also busting at the seams and increasing its educational offerings for beginning and intermediate beekeeping courses. Our 2019 spring conference is also well underway and fast approaching a new record attendance of over 800. It is never a surprise to receive a 3 a.m. email from Sandy regarding an upcoming SEMBA event or item, as Sandy never seems to stop working on behalf of us all. Thanks to Sandy's determination, dedication, and drive, SEMBA is on solid footing today and growing ever stronger.

Nothing received from Koffi, perhaps he is cleaning and repairing bee equipment, like we all need to do!

#### District 4 News; Koffi

Kpachavi: silentkapiary@gmail.com

#### District 5 News; John Davis: JFDbees@gmail.com

Greetings to all in district 5. Now that the weather in our area is officially white, I hope every one has their overwintering plan in motion. I would like to say hello to the Traverse City group. They meet the first Monday of every month at the Great Lakes Children's Museum. Located at at 13240 sw Bay shore drive TC Mich. And another hello to Daniel from Crosshatch, based out of Belair Michigan. Crosshatch is a organization working with many different guilds (clubs) ranging from art to agriculture, uniquely blending them.

Petoskey Bee Guild: I would like start with congratulations to Mike Banyia for receiving the **Beekeeper Of the Year** for our district. Thank you for all your hard work and contributions to the guild. Petoskey Guild meets every third Thursday of the month at Bearcreek Twp Hall at 373 Division Road, Petoskey. Upcoming events will feature such as review of our 2018 season and wintering bees in Michigan.

That's all for this round. Stay warm and pray for a mild winter.

For the love of bees, John Davis

### District 6 News; Theresa Bristol-Miller; km3tbm@gmail.com

Autumnal Greetings from your new District Rep, Theresa Bristol-Miller. I was honored to be elected to this position at the Fall State Meeting. Thank you to all who voted for me.

A quick bio for those who haven't met me yet, I am a member of Mid-Michigan Beekeepers Club and owner / operator of Circle T Apiary in Mayville. I look forward to helping beekeepers in my district and hope to visit the clubs in our district throughout the year. My email is <a href="mailto:km3tbm@gamil.com">km3tbm@gamil.com</a> and you are more than welcome to call or text 989-553-0709, and if you prefer social media I am on Facebook.

Now is the time of year when most of us are either prepping our bees for overwintering or heading out to warmer climates. We can all agree our district had a struggle with the weather this year. I also heard from quite a few beekeepers that hive beetles made an appearance this year after an absence the last few years.

I hope to meet with as many members as I can at the Spring Conference in March so feel free to contact me.



District 6 Beekeeper of the Year: Jim Withers of Withers Mountain Honey in Genesee

County. A Marine Corp Veteran, Jim retired from General Motors and became the accidental beekeeper extraordinaire. Jim, along with wife Lee, runs about 140 hives in different apiaries in Genesee County and West Branch. Jim joined the Mid-Michigan Beekeepers Club during its founding years and held the office of President for several years. Most notable is the work Jim does at For Mar Nature Preserve and Arboretum where he teaches honey extraction demonstrations as part of the Honey Bee Kids Series. Jim maintains several hives at the center which he uses to teach young children the importance of honey bees and pollinators. Jim is passionate about educating people about bees and has given numerous lectures and taught classes at conferences throughout the state. Always promoting the need for all pollinators and their habitat, Jim has met with Congressmen, appeared on local television specials and has had his story told in countless magazine and news articles. He has been a mentor to many and is most deserving of this award. Please check out the 2019 schedule at For Mar with the Genesee County Park Service to see when Jim will be lecturing, it truly will be an educational time for the entire family. Congratulations Jim!

#### District 7 News; Joel Lantz; <a href="www.upbees.weebly.com">www.upbees.weebly.com</a> or <a href="mail.com">lantzjoel@gmail.com</a>

Oh the ever changing weather in Michigan... especially in our Far Northern Peninsula. We had a good July and at least half of August. Good nectar flow and few no-fly days. Too bad we couldn't have stopped there. Cool too cold and much above normal rainfall-now 8 inches above average.

A good honey crop for those that pulled in August. From then on the bees stayed in, read some good books, and ate their winter honey supplies. Fall flowers, especially goldenrod, were disappointing. Still....overall a better than average year. As always, your location and its microclimate make a big difference.

Local UP honey, always in short supply, is selling at retail from 18 to \$23 a quart. Don't sell your bees' hard work short.

The UP clubs have been doing overwintering workshops to get all ready for the coming big snows. We have already (by Oct. 23) had 3 little snows. The forecast for this winter is for avg. snow of 160-220".

Mite counts seemed to be down around the UP this year. We really don't know why, but sure has been nice getting a bit of a reprieve.

Some interesting research being done by Paul Stamets and the University of Washington with mushrooms and bees. A mushroom extract could possibly boost the bee's immune system to help them ward off virus issues brought on by mites. Could it be?? Click here for more information.

The Superior Beekeeping Club will be having its annual potluck/auction November 29<sup>th</sup>.

Planning for the 2<sup>nd</sup> All UP Beekeeping Conference is well underway. Set aside March 31<sup>st</sup> at Northern Michigan University in Marquette.

Please contact me with any concerns or questions.

District 7 Beekeeper of the Year: Tom Nebel has been an active beekeeper for over 40 years. What he doesn't know about bees probably is not worth knowing. He continues to practice his "art" and has been generous in mentoring new and "old" beekeepers. Tom lives with his wife Grace in Brampton, Michigan (near Escanaba). He currently has about 20 hives—down from his peak of over 300. Tom makes a road trip every spring to lower Michigan or Wisconsin to pick up packages for those of us still shivering here in the Far North Country.

We all want to thank Tom for his lifetime commitment to bees and beekeeping.

