We had such a robust newsletter for 4Q that I saved some of the good stuff for this bonus addition. Thanks to all of the contributors. It is lovely to read about swarms up in trees as the temperatures go down.

Publishing a bonus newsletter also gives me the opportunity to suggest you solve all your gift-giving dilemmas right here and now by adopting a bee or two. The physical sunshine this time of year is limited; the emotional sunshine under this pandemic cloud is in even shorter supply. When you adopt a bee, your lucky recipient gets a beautiful postcard of “their” bee, and a fun letter about bees. Please order bees for loved ones by clicking here. The program goes until October of next year.

Charlotte Hubbard, newsletter editor

Would you like to receive a physical copy of MBA Newsletters?
Send an email to communications@mba-bees.org to let us know!

Updates from the Michigan State University Apiculture Team

Pollinator Performance Center:
MSU recently assigned a building and 15 acres on South Campus for a Pollination Performance Center (PPC). The space will greatly improve the Team’s capacity for pollinator extension, research, and teaching.

MSU Extension Apiaries
This year we were not able to use our Extension apiaries for hands-on workshops with Michigan beekeepers. We have been maintaining the colonies with the hope that we will be able to hold in-hive...
The beekeeping season is winding down! We pulled honey in August and had it extracted at a commercial honey extraction facility. We hope that next year we will be able to extract honey in the PPC! Now that we are preparing for winter, we are adding entrance reducers, spacers that provide upper entrances, and mouse guards. Our colonies have already been treated 2-3 times over the course of the season with varroa mite treatments, and we do an additional treatment of oxalic acid dribble on our colonies late in the season when they are broodless.

**MSU Entomology Field & Research Center in East Lansing:** Meghan Milbrath instructed a 3-week rotation for MSU veterinary students and received special permission to hold in-hive clinics for students. During in-hive sessions, Meghan Milbrath, Ana Heck, and Dan Wyns taught veterinary students general hive handling, how to monitor varroa, and how to examine a colony.

**MSU Tollgate Education Conference Center in Novi:** MSU moved honey bee hives from the Tollgate Center to campus in late April because MSU was limiting travel to Oakland County and would not give permission for regular colony inspections. We hope to move back to the Tollgate Center in spring.

**MSU Southwest Michigan Research and Extension Center (SWMREC) in Benton Harbor:** This yard received funding from SWMREC and participated in the Bee Informed Partnership’s Sentinel Apiary program again this year. A couple of colonies had queen issues and had to be combined with other colonies in the yard.

While it’s common to find small hive beetles in Michigan honey bee hives, we normally don’t see large infestations unless a colony is weak or queenless. Our Benton Harbor yard has been an exception. Over the past several years, we have found large populations of adult small hive beetles in the colonies, despite the colonies being strong in population and queenright.

**MSU Kellogg Bird Sanctuary in Hickory Corners (near Battle Creek):** MSU Extension 4-H Coordinators are developing video content for youth and teachers, and they recently recorded video of in-hive inspection.

**Lake City Research Center in Lake City:** Upon responding to a report of a tipped hive, it was clear that a bear had found the apiary. Once a bear finds an apiary, it will typically return and continue to feed on the hives. Our team moved the hives to campus to protect them. While most of the farm has electric fences to protect livestock, there were a few places that weren’t protected and that may have provided a path for the bear to find the hives. While 4 of the 6 hives were toppled, we only lost 2 boxes of honey. We were lucky that the bear hadn’t gotten into the brood nests and that we have surplus honey on campus to replace what was lost.

**MSU Escanaba Apiary:** We are preparing the colonies for winter, and we did a late-season varroa treatment of oxalic acid.

**Note:** All photos courtesy of Ana Heck.
4 of 6 hives were toppled over by a bear intruder.

*Far right: Hive scale data show us when the bear knocked a hive off its scale.*

The bear dragged a hive body box away from the hive and left frames scattered in the woods.

**Forthcoming Honey Bee Veterinary Textbook**

In January of 2017 the FDA mandated the “VFD” (Veterinary Feed Directive) rule which protects medically important antibiotics. Antimicrobial resistance to many antibiotics has become a global health epidemic such that there are now diseases for which we have no medicine. Many of the same antibiotics are used in our livestock and now veterinarians are responsible for overseeing the safe use of “medically important” antibiotics in food producing animals. Honey bees are livestock and if they do need antibiotics considered important for human use, a veterinarian must write a VFD or a prescription.

Although many livestock producers anticipated this rule, the beekeeping community was caught short because there were not enough veterinarians trained in honey bee biology/pathology. Michigan State University is a leader in honey bee research, and the entomologists at MSU were some of the first in the country to collaborate with a veterinary school. Dr. Meghan Milbrath taught a summer beekeeping course at MSU's College of Veterinary Medicine and has been a featured speaker at veterinary conferences. This collaboration between the departments has been a model for other land grant schools and has accelerated honey bee veterinary education.

Dr. Terry Ryan Kane, a veterinarian, ecologist, and beekeeper, started a bee practice in Ann Arbor (A2BeeVet.com). She is on the executive board of The Honey Bee Veterinary Consortium (HBVC.org), dedicated to educating veterinarians/students as well as networking with other beekeeping veterinarians and apiarists. The HBVC is now offering Student Chapter affiliation at our veterinary colleges.

It is important to know that even though veterinary involvement started with the FDA’s ruling on judicious use of drugs, there are a number of veterinary beekeepers who can offer basic “herd health” medical advice for honey bees just like they do for any other food producing animal. Dr. Kane and Dr. Cynthia Faux (also a veterinary educator/beekeeper) have co-edited the first bee veterinary textbook, *Honey Bee Medicine for the Veterinary Practitioner*. It is the first collaboration among veterinarians, entomologists, toxicologists, apiarists and a pharmacologist. A number of our well-known Michigan bee experts are contributing authors; there are chapters by Dr. Milbrath, Dr. Ingrao, Charlotte Hubbard and Dan Wyns. Dr. Huang and Ana Heck contributed beautiful photos. You will also see chapters from well-known bee experts from other parts of the country, but we can all be proud of Michigan’s significant contributions to honey bee health.

The book also includes discussion on native bees and the conservation of all pollinators. This work is of interest to everyone interested in honey bee and pollinator health. Veterinarians operate under the principle of ‘One Health’, that human, animal and environmental health are inextricably linked. Certainly, pollinators are essential to all our health and well-being.
The book was originally scheduled for publication this November but Covid slowed the process; we can expect publication in the Spring of 2021. It is currently available for pre-order from Wiley Press, click here, where you can see the list of chapter topics and authors. It is also available on Amazon.

What Year Was This Queen's Birth?

Assuming the queen was marked with the appropriate color*, in what recent year might have been her birth?

Thanks to Erin VonTom, for submitting this photo for the Adopt-A-Bee postcards. That queen sure is a bee-auty.

"What, You Raise Green Bees?" is a handy way to remember the colors (white, yellow, red, green, blue). W corresponds to year 1 as well as year 6 (five years, as there are five colors). Thus, a green-marked queen is most likely from 2019, or 2014 (or 2009, or 2004, etc.)

*I once used yellow in a wild afternoon of queen marking because I’d misplaced my blue pen. Wow was that confusing the rest of the season!

Connecting with the MSU Apiculture Team

eXtension Ask an Expert: Do you have beekeeping or gardening questions? The MSU Apiculture Team is asking that you submit these questions through eXtension Ask an Expert because it allows them to better track questions answered and direct your question to the right person to respond.

Facebook pages:
- Michigan State University Beekeeping (@MSUHoneyBees)
- Michigan Pollinator Initiative (@MichiganPollinatorInitiative)
- Heroes to Hives (@HeroesToHives)

Newsletter: To receive notifications of upcoming webinars for beekeepers and other MSU Extension events, please sign up for our newsletter and be sure to select “Pollinators & Pollination”.

MSU Bee Blog: Subscribe to the MSU Bee Blog to receive occasional updates about MSU Extension Apiaries and related programs.

Fundraising Campaigns

Adopt-a-bee: Participate in this FUNdraiser and bees win, as does whomever you adopt a bee for.

Beekeeping Education & Support Fund: MSU has a new crowd funding campaign to support its education and outreach work for Michigan small-scale beekeepers. While our team’s salaries are covered through funds from MSU, grants, and/or endowments, we often don’t have funds to run programs unless we receive a grant. Donations provide us with flexibility to promptly respond to opportunities and needs, and they may go toward printing materials, traveling to talk to beekeeping groups (once MSU’s travel restrictions are relaxed), and managing teaching colonies. To learn more or make a gift to support our work, please visit the Beekeeping Education and Support Fund.
Beekeeper of the Year, District 7

submitted by David Payant

Nancy Osterberg is the UP Beekeeper of the Year. Nancy has been instrumental in the establishment of the Northwood Beekeepers, headquartered in Iron Mountain, Michigan. They are right on the Wisconsin border and I understand they often meet in Wisconsin. She is currently Secretary/Treasurer of the Northwoods Beekeepers. It is fair to say that without her drive the Northwoods Beekeepers would not have been formed.

Editor's Note: I received the following lovely information from Nancy when I received her equally lovely photo. Thanks Nancy, for all you do for bees!

I am an enthusiastic backyard beekeeper in the Iron Mountain area. I bought my first package of bees in 2013 and founded the Northwoods Beekeepers club (https://www.facebook.com/groups/1857730991152872) in 2016. It took me just (just!) two winters of making the 180-mile-roundtrip trek to Marquette to attend the excellent meetings of the Superior Beekeeping Club to realize: "We need a local club!"

Since I was not an expert beekeeper, I was never tempted to be a one-man band for our club. From the start, I have seen my role as offering local beekeepers opportunities to connect with each other and providing our club's teachers and mentors a platform to shine.

Swarm Notes from the Far North UP, by Joel Lantz

I really don't have a favorite swarm story as they are all a wonderful experience in our bee/beekeeper world. My favorite swarm activity is to stand inside a massive swarm as it begins to coalesce. Following are a few of the memorable ones that I can recall.

*Several years ago, a year of “high” swarms. Four swarms at the very top of tall trees …..I cut the trees down and hived the swarms. My wife was not happy with all of the missing trees in our small clearing. I watched the next one fly in to the wild blue yonder.

*I met some great beekeepers from Tennessee at a Heartland Apiculture Society conference several years ago. Seems that swarming always comes up when you have beekeepers together. When I mentioned about my high swarms, they stared at me, and one guy said “did you shoot it with a shotgun?” I thought he was kidding me, but he assured me that it works - “sometimes”. I wouldn’t recommend this method, but I did try it and they came to the ground and I hived them… no kidding!

*My daughter and I were attempting to hive a large swarm that was 20 feet up in a small tree. Being the ‘smart’ bee guy that I am, I start cutting the tree down with a chainsaw and Cassandra was attempting to let the tree down slowly. Trees are much heavier than they look. She couldn’t stop it, hollered, dropped my saw and we both ran. All caught on video by my laughing wife.

*My wife loves the bees, but loves me taking care of them. I am at an MBA summer event when she calls that there is a swarm on a bush near the hives. I’m not sure, but I think she was expecting me to drive 400 miles to hive them. I cautiously suggested that she could do it as she had watched me many times. She did it up just fine and now I can’t leave during swarm season.

****Embrace your swarms… they are an essential aspect of bee biology and a premier aspect of beekeeping.

Covid Food Assistance Program

Agriculture Secretary Sonny Perdue recently announced the second round of Coronavirus Food Assistance Program (CFAP) payments, which will provide additional aid to beekeepers due to losses generated by the COVID-19 pandemic. If you are a producer whose operation has been impacted, you may be eligible for this second round of direct support. USDA’s Farm Service Agency (FSA) is accepting CFAP 2 applications now through Dec. 11, 2020. Visit farmers.gov/cfap for more information and to apply.
After clicking on the link, enter ‘honey’ in the “Type or select commodities” field and click the SEE RESULTS button and you'll be provided the basic information regarding payments for honey.

Additional information and application forms may be found at farmers.gov/cfap. Documentation to support the producer’s application and certification may be requested. All other eligibility forms, such as those related to adjusted gross income and payment information, may be downloaded from farmers.gov/cfap/apply. For existing FSA customers, including those who participated in CFAP 1, many documents are likely already on file. Producers should check with their FSA county offices to see if any forms need to be updated.

Again, the deadline to apply is December 11, 2020.

No self-respecting bee has ever said ‘buzz’
Beekeepers don’t know this, and that’s because
They’re only human, and don’t speak Bee
What we say is spelled zzzzzzzzzzz
And if you can’t hack it, just spell it zzzzzzzzzzzz
But when I’m in your jacket, it’s ZRZRZhRRRRRRRRRR!
And because you think you can ignore my ping
I’ll send you back running with a Quaran-Sting!

Hey, beekeeper! Spell this!
O-W-H-T!

by Anne Barratt-Fornell

Photo on the left courtesy of Marshall Beachler. It is one of the postcards used in Adopt-A-Bee's worker bee adoption.

Save the Date!
March 2-6 ANR Week
155th annual MBA Spring Conference
Vendors - Speakers - Bee Social and more

An Amazing Swarm Season
by Jeff Moon

What an interesting swarm season this has been so far. As we come out of winter here in SE Michigan, my brother, Dave Moon, and I would begin to get a game plan together for rebuilding our hives in our 2 yards. We, like many beekeepers, would see a certain amount of loss over the winter. Some years good, some years bad. This year it looked like we were going to come out of winter with the majority of our hives surviving. By time we got through all of the huge temperature swings in February, March and April, we managed to lose 14 of our 19 hives, that's a 73% loss. That was so hard to accept, but we knew we had to get busy.

In the past 5 years we would start by hanging 6 swarm traps on Dave's 10-acre property at his home, where he backs up to nothing but trees. Over these years we would catch an average of 5 swarms in these traps and it was a way to quickly rebuild our winter losses as well as find some great native Michigan bees! We have not purchased any packaged bees since we learned of this process of catching feral bees that are swarming out of these woods. The guy in the YouTube video that explained the Swarm Trap Method boldly stated an 80% catch rate. Sounded too good to be true! The guy was right, ever since we started using these traps, we’ve seen something very close to an 80% catch rate. We were constantly pulling down these swarm traps late at night and getting them into new hives. It really worked, until this year! We had a ZERO Catch Rate in the 6 boxes that were hung high in the trees this spring. So what’s changed?

This year we had a very different swarm season, one that I’ve never seen in my 11 years of beekeeping. First, it seemed to start up earlier and my surviving hives seemed to ramp up quickly as well. With only 5
hives to start this season with, that began to be a much bigger task than I thought. It seemed like every time I was looking in the hives, the bees were wall to wall and queen cells seemed to appear overnight, or so it seemed. There was a 2 or 3 week period that I was watching swarms happening within my own yard or at my brother’s place. On May 16th, I texted Dave that I was headed to my backyard to catch yet another swarm and he responded back “I see your one swarm and raise you one”. He went on to say that he was in the process of catching 2 swarms in his yard simultaneously. Within an hour we had 3 more hives started from these swarms, caught 22 miles apart.

We were making up splits, giving away splits, cutting out queen cells and putting them into my homemade incubator to complete the queen emerging process. I was giving away queens like never before. I think I hatched out 15 or more queens this season and I now have 12 queen cells being created in my observation hive. Today the hives in my yard are still exploding. One hive in particular now has a pollen collector on it and has nearly filled a 2nd honey super. This seems unbelievable since this hive swarmed multiple times and I’ve split that hive into 6 others, and it’s still full of bees and the honey production is huge. My last inspection shows no more queen cells, so that will give me a little break. I think there is something very special with these Michigan queens and their ability to create very large colonies quickly. The bees are physically smaller, and the new honeycomb that they build is smaller too. We also are finding that they seem to be a calmer bee to work with as well. Many times we are working in these hives with no smoke. So we’re excited with the hives that we now have running! -->

So what is going on this year that’s different from the past? My answer is “I’m just not sure”! It’s been a very different swarm season for us. In 3 to 4 weeks we went from 5 hives to 24 hives. The most we have ever had, especially this early in the season. We caught 10 swarms and only 1 got away, as it was 30’ up in a tree. We couldn’t keep up, as we were buying, building and painting new hives throughout this madness. I wondered if this was ever going to stop. I was driving Keith Lazar (Buggsnest) crazy as I needed more and more frames, boxes and other hive materials every few days and I always need them quickly. I met up with Keith many times during these crazy weeks, just to stay ahead of this swarm demand!

As things began to settle down and our Bee yards were full. I received calls of other swarms, one at a bank a few miles away and one in a residence yard 45 minutes away. I certainly didn’t need anymore bees, but as a beekeeper you can’t leave them hanging. It was time to give back to other beekeepers. Two of the swarms I gave away, one to a brand new beekeeper, Sheryl, who literally was building her first hive while the swarm sat in my nuc box in the back of her yard. She was still waiting for her smoker and bee suit to arrive, but the bees got to her yard before the beekeeper’s equipment did. I had told her if she got the equipment, that I would get her the bees! So the timing was off just a little. The other swarm went to a friend Sean who had never seen a swarm in person and I instructed him on the procedures to best capture his first swarm. It’s always very rewarding when you share this amazing hobby with others, as there is always so much more to learn.

I thought I knew a lot about beekeeping 5 years ago, but after this swarm season I realize there is so much more that we can learn.
from the bees. I'm retired now and spend more time working with the bees. I'm always trying to discover new ideas or small things that can all help the survival of the bees and their hives. I have several things I'm working on to make vaporized mite treatments safer for the bees and easier for the beekeepers. It's not my idea, but I'm trying to simplifying the process. I'm continuing to photograph and create videos of things happening in a hive utilizing a handmade observation hive I built several years ago. I'm raising queens from our strongest hives and continue to play with hives from actual tree trunks. It's all a part of this amazing beekeeping hobby that we all share. 💜❤️bij