



# East Texas Beekeepers Association



## March Newsletter

March 4, 2021



~ Jim Biles; Executive Director

In over 20 years of beekeeping, I've never experienced anything like what this winter threw at us! I kept telling myself that honey bees survive in weather like this every year, just not in Texas. Several people contacted me to ask, "What should I do?" With confidence I replied that if the bees have plenty of honey stores, they will be fine.

On Saturday after the week of deep freeze, I visited a couple of my bee-yards. Sunny and 40 degrees, I was surprised to see a cloud of bees flying around each of my hives. This actually should not have been a surprise. After 10 days of super cold weather, the bees were taking advantage of the break to take a cleansing flight. The evidence was right there on the hive covers!

More importantly, all of the hives in these apiaries had survived the cold. I made sure each colony had feed, and waited for a warmer day to actually inspect hives.

The lesson here is clear: Honey bees have survived the elements for a long time without my help. The only thing I can take credit for is the January inspections, making sure each of my colonies had adequate food stores.

Looking forward, March is a critical month for beekeepers. In fact, I refer to March as Beekeeping Month. This is the time to manage hive build up. Not enough build? Perhaps the hive can be stimulated by feeding, or maybe the queen needs to be replaced. Too much build? Time for adding space or making splits to avoid swarms. March sets the tone for the entire spring, and there are many questions to ask and answer. More than any other time of the year, this is when it helps to have the help of an experienced beekeeper. If you're new to beekeeping and don't have a mentor, find an experienced beekeeper that lives near you and plan to shadow them during a few visits to the bee yard. You can start this process by coming to the March meeting and meeting as many people as possible.

This is also a good time to sign up for the April ETBA Beekeeping Clinic. We'll be having a half day of classroom to go over some basics, and then spend the afternoon in the bee-yard. There is no better way to learn beekeeping than spending time inspecting hives.

I hope you and your honey bees came out of the cold weather okay. I look forward to seeing you at the March ETBA meeting.

President—Melissa Maeker  
Vice President—Connie Collins  
Exec. Director/Reporter— Jim Biles  
Ambassador—Carolyn Savage  
Treasurer—Jennifer Palmer  
Secretary—Tish Kennedy  
Member-at-Large—Stanford Brantley  
Program Director — Meagan Elzner  
Newsletter Editor—Trish Wilson  
Webmaster—Ken Wilkinson



## Next Club Meeting

### March 4<sup>th</sup>

United Methodist Church  
405 West Main in Whitehouse  
6:30 PM  
[www.etba.info](http://www.etba.info)

## *Practical Experiences in the Beeyard* by Stan Brantley



As I am writing my article, I am focusing my thoughts on the new growth in early blooming foliage and increased activity in our bee hives. Before my article made it to print, the ArkLaTex area experienced its most severe cold in recorded history with actual overnight temperatures, including East and Central Texas, dropping below zero and daytime highs in the low teens, plus two and three days of snow, ice and freezing rain. February 14-18 hit us hard.

By Sunday the 21st, winter was gone and temps headed back into the mid-50s. Given the severity of this cold spell, I shifted focus to talking about the aftermath of the severe cold on our bees.

This polar blast has hit our bees at the time they are shifting into a spring growth pattern, a situation that could potentially cause the loss of some hives. We do not yet know the deep freeze's impact on early pollen availability. Shrubs, trees and small ground flowers may have frozen and may not recover to provide early pollen.

I checked the hive in my front yard Sunday the 21st after the snow began to melt. There was three inches of snow on the ground but the temperature was 50 degrees and some bees were flying. On the snow in front of the hive were about 150 dead and crawling bees. This is not unusual after such a severe cold spell. There were also splotches of yellow discoloration on the snow, most likely from bees taking cleansing flights after being confined in the hive for several days.

By Monday the 22nd, the temperature was 55 degrees and the bees were flying much better and not falling in the snow. I saw white specs on the landing board that were most probably crystallized honey or cappings that the bees cut off cells of honey to get access to food. Observing the landing board, I saw bees emerge with the white particles in their mandibles and fly off with them. Lazy house bees were also bringing white particles to the landing board but just dropping them and going back into the hive. Landing board activity increased throughout the day, with more bees leaving the hive and returning. The returning bees were not carrying pollen. I suspect they were gathering water to liquefy crystallized honey or sugar. The hive will need the dissolved food to begin brood activities again. It may be a week or more before plants recover from the cold enough to produce more pollen.

After such a cold spell, you may also see bees carrying out full-term pupa and flying off with them. You should not be concerned about disease as the pupa most probably died from the cold. This is an indication there was more brood in the hive than the bees could keep warm, resulting in some pupa deaths. The house bees will uncap the dead pupa and remove them from the hive.

As soon as possible, check your hives to determine the impact of the cold on your bees. If you find hives with no visible activity, look in the hive to verify if it is alive or dead. If it is dead, brush off the dead bees and move the hive into storage. Do not worry about bees dead in the cells. The next occupants will clean all of the cells and remove the dead bees. You can reuse this hive for a captured swarm, to hive a nuc, or to make a split.

Check surviving hives for stores. Bees may have eaten a lot of stored food during the cold and will also be using a lot as they ramp up brood production again. Make sure they have adequate food to survive until the trees and flowers recover and start producing nectar and pollen. If the day is warm enough to open the hive for inspection, check to ensure you have a surviving queen.

Observe the landing board for bees bringing in pollen. If you see no pollen coming in, feed a small portion of pollen substitute until the plants recover and natural pollen is available.

If you lost hives this winter, develop a plan to replace them. If you plan to purchase nucs or hives, get your orders in right away. We may find supply does not keep up with demand this spring. Your other options include trapping swarms and splitting your existing hives.

~ Mr. Stan Brantley





### *The March 2021 Program.....*

We are looking forward to seeing everyone in March, hopefully by then everyone will have warmed up after this cold spell! I'm hoping everyone's bees did ok during this winter storm. At the meeting we will be nominating officers for next year, so if you know someone who should run, be sure to nominate them! Voting is done at the April meeting. After nominations we will then do a meet your neighbor chat, and have those in the same towns get into groups so you can meet other beekeepers near your apiary. This has proven successful so that everyone has contacts near them when they have questions or need some help in the bee yard. \*\*\* *Keep in mind we will do our annual auction in May to raise funds for our Queen & Ambassador program, so be thinking of something you'd like to donate for the auction if you're able.*

*Take Care and Please Stay Safe*  
Meagan Elzner, Program Director

**Happy St. Patrick's Day !**

## **ETBA Beginner Beekeeping Class**

Join us April 10<sup>th</sup> - 8:30am-4pm - Whitehouse, TX



### You will learn:

- Basic bee biology
- How to check a hive
- Beekeeping equipment
- Pests & diseases of the hive
- Yearly overview of bee hive management
- Hands on experience

**\*We will spend at least 3 hours checking hives\***

#### Details:

- Cost: \$100 (box lunch included)
- You can pay Jennifer Palmer at the meeting, cash or check only
- All proceeds go to the club for the Scholarship Program
- You need to provide your own protective gear, and bring it to class that day. Students without proper protective equipment will not be allowed to work in the bee yard.

This class is intended for those who are new to beekeeping or have very limited beekeeping experience.



We had a good crowd at the February meeting (around 50 I think). It was also encouraging to see new people coming to learn more about bees. I am proud to announce that ETBA will have two scholarship students this year and I hope they will be at the March meeting for introductions.

As I write this, we are under several inches of snow. Two snowfall events in the same year is rare in East Texas. If you haven't already, complete a quick check on your bees (ideally when temp > 60) to check their stores and what the brood patterns look like. Feed them if they are light (measure with 2 finger lift at the back of hive) as we will probably have a cold snap around Easter. The warm days and pollen from the elms and maples has the queen gearing up for the honey flow. Cold snaps could cause the hive to run low on stores. Starvation is a definite possibility. Normally, we don't feed pollen as the elms have abundant pollen, but if you wish, you can feed pollen as needed. Use a small amount at a time since the small hive beetle (SHB) also loves to eat pollen.

When the weather consistently is warm, the honey flow will arrive. Be ready to feed until weather warms then be equally ready to put your supers on the hive. It is truly amazing how fast the hive expands in the Spring and to take full advantage of our honey flow.

In March, you will see a tremendous growth of your hive as the queen lays up to 2,000 eggs per day. If you don't see eggs, you may not have a queen. If you don't have an extra queen (most won't in March), then merge the hive with a strong hive until you can procure a queen (and re-split the hive). You can use the newspaper method to merge. Take the top off of the strong hive, put two layers of newspaper between it and the old hive boxes (on top). Replace hive lid. By the time the bees have chewed through the newspaper, their smells will mingle, and they won't fight each other. The strong hive will defend the drawn comb (from moths and SHB) until you can re-queen. Be on the lookout for swarm cells. By the end of March, some hives will be gearing up to swarm.

By the end of March, you can consider removing entrance reducers. This will allow less congestion at the entrance for the bees returning with pollen and nectar, as well as, increasing ventilation on hot days.

Another activity you could try this year is to put out swarm boxes and try to catch a swarm. Check out this website: <https://www.keepingbackyardbees.com/how-to-build-a-swarm-box/> I built several of these and have caught swarms. I use lemongrass essential oil as a "lure" to the swarm box as it is, reportedly, similar in smell to the queen's pheromone.

If you want to be on the ETBA swarm list call, please email me your name, general location you are willing to travel to catch swarms and a phone number. My email is: [etbaeducation@hotmail.com](mailto:etbaeducation@hotmail.com)

I am excited as we start this year's honey flow. May the year be successful for all of us.

Remember, we are once again offering a Beginner Beekeeping Class on April 10th. Please see details on page 3 of this newsletter. Also, in May we will be having our annual ETBA auction in support of the Queen and Ambassador program. It's lots of fun and helps in supporting our public education programs. If you have honeybee items you'd like to donate for the auction, it would be very appreciated.

~ *Melissa Maeker, President; ETBA*



Spring is getting close! I know I am excited about it after all that snow, and I hope everyone came through it unharmed. Also, as a side note, I have discovered another use of the hive tool. You can use it to break up the snow in your backyard that you desperately need to flush your toilet with. The hive tool is such a limitless device. However, I cannot wait for the green fields and the wildflowers to begin blooming. We here at CNC Honey Farms are scrambling to get everything ready as the snow delayed our work a bit. Every year there never seems to be enough time to get all the things around here completed.

This week we will be prepping all of our hive boxes for splitting. Preparing for the splitting season means rounding up pallets and placing new boxes with new frames and feeders onto them. Having done this makes the splitting process easier as everything is ready and organized for the beekeepers. However, this weather has not been helping us out much. The stress to get everything done is starting to mount. I feel as though our pallets are spread all over the county, and I still haven't gotten all of the boxes painted. How will we get it all done? Every year we do, and before we know it, spring will be here.

Soon too, we will begin raising queen cells. Raising queens is my favorite part of our whole beekeeping calendar. So much of beekeeping is stacking boxes for me—building boxes, painting boxes, moving boxes, transporting boxes, selling boxes, etc. Raising queens is such a magical time. My father always says that if you want to learn about bees, raise queens. It is so true. You slow down and appreciate the bees and understand their cycles. When I am grafting, I am moving small larvae, this tiny fragment of life, and with God's help hoping to transform her into a queen. It is like my own little coronation ceremony right there in my dining room or even a tent at times. We then place the larvae into a queen-less hive and wait. Seeing that the bees have accepted them and believing that they are good enough to make it into a queen cell is such an experience. The queen is such a vital part of a hive, and to then later see my queens laying frames of eggs makes me feel so proud!

As crazy as this weather has been, I pray that we have a beautiful Texas springtime ahead of us. If you are still interested in buying bees, we still have bees available for purchase at CNC Honey Farms. Please visit our website for prices and availability, or email me at [connie@cncfarms.com](mailto:connie@cncfarms.com).



ETBA AMBASSADOR ~ *Carolynne Savage*



### Goodbye Beekeeping

It's official - I am no longer a beekeeper. According to Merriam-Webster, a beekeeper is "a person who raises bees". This definition implies that caring for actual, physical animals is a requirement for calling yourself a beekeeper. At this point, I think it's pretty obvious where this article is going, so I'll just cut to the chase—all my bees are dead.

This fall was rough on my hives. Heavy mite loads wiped out two-thirds of my colonies before they even had a chance to think about winter. One hive remained only because it, once again, turned itself queen-less. By a stroke of luck, they managed to create a new queen, causing a break in the brood pattern saving them from the mites, but dooming them to another fate.

I had my suspicions about the fitness of this new queen from the start. She came late in the year as drones became scarce, leading me to think she was poorly bred and would need swift replacing in spring. The time between losing the old queen and making a new one was time lost for building up a strong population going into winter. The seasons progressed, but the hive did not.

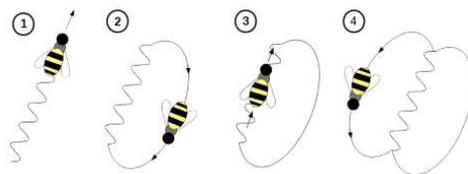
Winter hit Texas with a vengeance, a single day saw freezing temperatures, biting winds, and banks of snow. This unprecedented weather caused many agricultural losses for our state, but I didn't want to consider the possibility that my bees would also be affected. As I gazed out the window through rolling power outages and watched ice accumulate on the treetops, I knew my hive was finished.

They fought the cold until the last. A brief inspection on the first warm day after the storm confirmed this. There were the bees, huddled tightly around their queen, the remnants of a hive working together to prolong its existence. Nature was against them, and sadly they did not stand a chance.

Okay, so when I said I'm not a beekeeper anymore, that wasn't exactly true. Even though I currently have zero bees to watch over, I'm not going to let that stop me because I am still a beekeeper at heart. Things happen. Parasites do overpower honey bees, they kick their queen out, and the weather forgets where it is and decides to unleash Canada. I can't help that, but I can help how I respond. It's my responsibility as a human being and beekeeper to work up from where I am. To me, that looks like getting more bees. I have three hives worth of equipment in the garage, and I intend to fill them. If I have learned anything from this experience, it is this: mishaps aren't failures, they are obstacles intended for us to work around and to come back from them stronger than ever before, and I think I'll do just that.



## Honey Bee Communication



Honey Bees could be considered a modern-day superhero. They generate over 15 billion dollars annually through pollination. One third of all our food is thanks to these super bees. However, did you know that honey bees have one of the most complex pheromonal communication systems in nature? With a single dance, worker bees can communicate distance, direction & quality of a nectar source.

Of all the ways that honey bees are super, besides pollination, the most interesting way is their complex communication. Honey bees communicate in two different ways: odors and dances. Inside a strong beehive there can be 20,000 to 60,000 bees, and to operate effectively they need to communicate. Pheromones are the primary method to communicate. Bees possess 15 known glands that are used to produce an array of different pheromones each with a different meaning, and reaction from the bees. Each different caste of the honey bee: queen, worker, drone, has its own pheromones. All pheromones are known as either releaser or primer pheromones.

Primer pheromones affect the bee who is receiving the pheromone in a physiological way; it will trigger complex and long-term changes in the receiver, which will affect its behavior and its own development. Releaser pheromones are not long term and only affect the receiver, and at a behavioral level only.

The queen bee's pheromone, the Queen Mandibular Pheromone (QMP), is vital to hive operations. QMP is a primer pheromone the queen releases from her mandibles and the workers distribute around the hive. QMP has three main long-term effects. It discourages the raising of queens and prevents the worker's ovaries from developing. QMP also tells the hive that the queen is alive and well, or termed "queen-right." QMP also affects behavior; it keeps a swarm together, and while the queen is on her mating flight it attracts drones to mate. QMP also attracts something around the queen known as the retinue. The retinue is more commonly referred to as the queen's court and consists of 8-10 workers surrounding the queen. Their feeding and cleaning her is their top priority. They also rub on the queen to get the pheromone on them, then distribute it throughout the hive, thus allowing other bees to smell her. Among many other pheromones are the alarm pheromone and the worker pheromone, both playing an important role in the hive. While super-heroes, each have their unique power, the queen bee outshines them all with her ability to control 30,000-60,000 bees with a single smell.

Aside from using pheromones, workers use dances for other communication. **Honey bees have four main dances they use while communicating, the waggle, the sickle, the round, and the tremble dance.** The foraging workers are the primary users of the dancing language, since the dances refer to the location of nectar and pollen sources. The most common dance in the hive is the waggle dance. The **waggle, or wagtail dance** consists of the dancer vibrating from side to side quickly in a straight line, then turning to the left or right alternately to return to where she started. The waggle dance is a way for the foraging scouts to recruit other foragers to a new-found nectar source.

The waggle dance communicates direction based on the sun's position. Dancing at different angles tells the bees which way to go related to the sun. Not only does the dance indicate direction, but also distance. This makes the waggle dance the most accurate dance the bees do. Based on how long it takes the dancer to complete one circuit, one half circle, communicates to the recruits just how far away the nectar source is.

