# Fort Bend Buzz newsletter of the Fort Bend Beekeepers Association

promoting safe, responsible, successful beekeeping

January, 2017

The January 10, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome. Membership dues are \$5.00 for the calendar year. The Association provides coffee and lemonade for meeting refreshments while members volunteer to bring snacks. Thanks to Nancy Hentschel who volunteered to bring something sweet for our first meeting of the year. Salty treats will be welcome. The meeting will be called to order at 7:30 after 30 minutes of social time. Once again, no one volunteered to give our opening invocation. If you can help with this, please see President Daryl Scott before the meeting.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** Everything I read and hear is that varroa mite control is critical. Nonetheless, no one seems to be treating for mites. Should I be treating for mites or not?

An A: This is a great question since probably only a handful of our members routinely treat for varroa or, more importantly, sample for mite problems in their hives.

When compared to the size of its host, the varroa mite is the animal kingdom's largest external parasite. Adult female mites feed on honey bee hemolymph (the insect equivalent of blood), shortening worker lifespan and weakening the colony. But the real damage done by varroa is the transmission of disease. Viral diseases spread by mites are likely responsible for most hive losses, especially over winter (starvation should not be an issue with your managed hives). At other times of the year, a hive weakened by mites (and the diseases they carry) cannot defend against small hive beetles or wax worms. The real cause of "slimed" hives is often "parasitic mite syndrome". The problem is perpetuated since robbers in a deadout are carrying more than honey back to their hives. Varroa (and the diseases they carry) just catch a ride to the robbers' hive as they make off with free honey.

A beekeeper's decision to not use miticides should never mean doing nothing about varroa. "Survival of the fittest" may seem to be an ok strategy with your bees, but it probably isn't, since the mites that killed the colony just move on to their next victim, maybe right there in your beeyard.

The December, 2016 issue of the American Bee Journal includes a powerful article entitled "Your Bees Don't Have To Die". You probably should read it at least twice. It maps out a strategy of monitoring mite numbers in the beeyard and responding with control measures and requeening from hygienic stock. Varroa reproduce under capped brood and hygienic bees detect the immature mites and remove the infested pupae.

#### **November Meeting Notes**

We had 40 members and guests sign in at our November meeting. A head count revealed that at least 12 folks didn't sign the roster. Please sign in! These sheets are an important record for our organization

With no volunteers, President Daryl Scott again had to open our meeting with an invocation and the Pledge of Allegiance. We'll be calling for volunteers one more time at our January meeting and hope members will step up to help.

Seven first timers attended our No-

vember meeting. Four are making their plans to be up and running with bees in the spring. Two had lost their hives and were getting ready to try again while one had inherited a top bar hive and needed to learn how to manage it. Welcome!

Daryl reminded the group of the benefits of belonging to the Fort Bend Beekeepers. Meeting programs and the opportunity to meet other beekeepers are intended to focus on *safe*, *responsible*, *successful beekeeping*. The club owns equipment for member use as well as various community outreach materials (see the inventory on the back page). Group ordering of honey containers has saved our members thousands of \$\$. Discounts on American Bee Journal magazine subscriptions are available too.

Daryl reminded us of the 2017 North American Beekeeping Conference & Tradeshow to be held in Galveston January 10-14, 2017. Daryl's fun bee facts included an old wives tale that a bee coming inside means that a visitor is on the way. If you kill the bee, the guest won't be a pleasant one. Another fun fact was that a space shuttle flight in 1984 carried along 3,300 bees in a confining box. Despite being weightless, they built normal comb. NASA was a little surprised that the space hive was "just as clean as a pin" when it returned to earth. Beekeepers know that that is normal behavior too since bees

don't poop inside their hive. As we would expect, they waited for the end of the seven day trip to make their cleansing flights.

Meeting topics included Nancy Hentschel's demonstration of honey refractometer use (excess moisture can allow honey to ferment!). Jeff McMullan gave a few pointers on smoker use since he lost his favorite one out of the open tailgate of his truck then ran over his new one in the beeyard. Gene deBons noted that there were lots of "help wanted" ads for beekeepers (starting wage is \$11.15 per hour). Gene also reported on an eloquent description of a Wright brothers' flight in 1904. Their first flight was made in 1903 in Kitty Hawk, NC, but this report was from their home town of Dayton, OH and written by Amos Ives Root, the original author of The ABC of Bee Culture in 1879. The 41st edition was published in 2007.

A variety of door prizes were donated for our last meeting of the year. Thanks to the donors and congratulations to the winners.

#### **Treasurer's Report**

Our November treasury balance was \$2,491.09. Since then we deposited \$40.00 for use of the club's honey harvest equipment. On the spending side, we bought a honey refractometer (\$71.64), meeting supplies (\$14.68) and more photos and hive components for our learning hive (\$70.95). The resulting treasury balance is \$2,373.82, consisting of \$50.00 in cash for change and \$2,323.82 in our checking account.

A financial summary and year-end property inventory for 2016 is presented at right. The main highlights are the Mentoring Program activity plus the \$391.05 in donations received during the year.

#### **Election of Officers**

We will elect officers at our January meeting. Anyone that can help in a leadership role is urged to contact Gene deBons (281 630-7756). Gene says that "since his phone still ain't ringing, he assumes it still ain't you".

#### **Dues Are Due**

Membership dues for the Fort Bend Beekeepers Association are \$5.00 for the calendar year. Don't forget to stash a five dollar bill in your wallet and get your dues paid at our January meeting.

#### **Volunteers Needed**

Our Association provides coffee and lemonade and members volunteer to bring a snack or dessert to the monthly meetings. At our January meeting, volunteers are needed to sign up to provide refreshments for our 2017 meetings.

We'll also pass around a sign up sheet for the invocation at our monthly meetings.

### Fort Bend Beekeepers Association 2016 Financial Summary

Opening balance (Jan. 1, 2016)		\$2,682.49
Income		
member dues paid (160 at \$5.00)	\$800.00	
donations	\$391.05	
Mentoring Program income	\$275.00	
extracting equipment income	\$50.00	
<b>Total Income</b>		\$1,516.05
Expenses		
meeting supplies and expenses	(\$1,116.75)	
cart for meeting supplies	(\$121.25)	
TBA dues	(\$50.00)	
memorial flowers	(\$85.98)	
honey refractometer	(\$71.64)	
additional outreach materials	(\$369.10)	
<b>Total Expenses</b>		<u>(\$1,814.72)</u>
Ending Balance (Dec. 31, 2016)		\$2,383.82

Note: In 2016 the Association collected (and disbursed) a total of \$3,286.95 for the group purchase of honey bottling containers. The collective purchase shipped to a single address saved over \$1,000 in shipping costs!

#### Fort Bend Beekeepers Association December 31, 2016 Property Inventory

	Date	Initial	
Description	Acquired	Cost	Member Contact
four framed beekeeping posters	various	unknown	Jeff McMullan
Learning Hive	8/28/2009	\$144.49	Jeff McMullan
additional frame photos	2/25/2016	\$98.37	Jeff McMullan
additional hive body/btm bd	11/20/2016	<u>\$70.95</u>	Jeff McMullan
		\$313.81	
red wagon	10/16/2009	\$45.98	Jeff McMullan
extracting equipment			Jim Lynch
extractor, stand, etc.	8/19/2011	\$583.33	·-
pin uncapper	11/8/2014	\$15.15	
honey refractometer	11/30/2016	\$71.64	
		\$654.97	
solar wax melter	1/10/2012	donated	Nancy Hentschel
frame assembly gear	3/5/2012	\$157.88	Nancy Hentschel
outreach exhibits			
banners	11/7/2013	\$80.96	Jeff McMullan
posters and easels	2/8/2016	\$193.30	Jeff McMullan
•		\$274.26	
public address system	6/21/2014	\$620.22	Jeff McMullan
10/18 remaining swarm traps	11/3/2014	\$78.03	Boone Holladay
remaining Mentoring Program s	upplies:		Wendy Chopin
2/20 mentee ball caps		\$14.18	
3/10 mentor ball caps		\$21.27	
70/100 Beekeeper's Journals		\$504.70	
42/42 extra Journal fillers		\$45.78	
6/40 copies "The Beekeepers Handbook"		\$109.98	
		\$695.91	

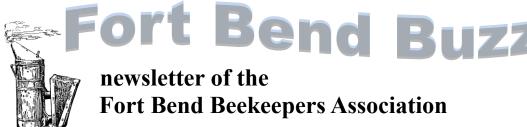


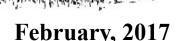
Texas A&M AgriLife Extension Service Fort Bend County 1402 Band Road, Suite 100 Rosenberg, TX 77471 Dome Holladay

Boone Holladay

County Extension Agent- Horticulture Fort Bend County jb.holladay@ag.tamu.edu 281 342-3034 ext. 7034

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status. Persons with disabilities who plan to attend this meeting and who may need auxiliary aid or services are required to contact Texas A&M AgriLife Extension Service at 281 342-3034 five working days prior to the meeting so appropriate arrangements can be made. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas cooperating.





The February 14, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments while members volunteer to bring snacks, but the volunteer signup sheet disappeared after the January meeting. If you recall volunteering, don't forget to bring salty or sweet treats. The meeting will be called to order at 7:30 after 30 minutes of social time. Once again, no one volunteered to give our opening invocation this month. If you can help with this, please see President Nancy Hentschel before the meeting.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** I want to up my game by raising a few queens. Where do I start?

**An A**: It is suggested that you start by considering what you are trying to achieve. It is ok to raise queens just to see if you can, but you should be determined to improve the overall quality in your beevard as well. Selecting a queen mother is therefore the critical first step. Honey production, vigorous brood rearing and docile nature are considerations, but probably the most important measure is low varroa mite infestation. You should do a "sugar roll" as a measure of the colony mite load before choosing the queen for your queen mother. A "zero" is good, but understand that all of the mites won't fall off in the sugar roll and, more importantly, there may be five or six times as many mites hidden in capped brood. Also, recall that the queen has semen stored from a dozen or more drones, so there is still a bit of a crap shoot there (unless you want to buy an instrumentally inseminated breeder queen for a couple of hundred bucks!).

When raising dozens of queens, you introduce very tiny larvae (less than one day after hatching) into a queenless starter hive. Anxious workers will quickly begin rearing new queens. You place the tiny

larvae in "cell cups" in a "cell cup holder" (pictured in bee supply catalogues). They can be "grafted" by scooping them out of their brood cell using a small spatula-like grafting tool. You need to be sure to get as much royal jelly as you can as you scoop up the worm-like baby bee. Very sharp eyes (or a magnifying lens), adequate lighting and a steady hand are necessary. A damp cloth cover helps prevent the larvae from drying out as you do this delicate work.

When raising queens, the "starter" (queenless) colony may begin with a quite a few larvae, but would soon focus their attention on a much smaller number, maybe as few as two or three. For that reason, the cell cup holder is usually moved into a strong queenright "finisher" colony after about 24 hours in the starter hive. The queenright bees are anxious to raise a number of new queens for future colonies. They can mature dozens of new queens.

As an alternative to separate starter and finisher hives, you can use a device called a "Cloake Board". It incorporates a queen excluder, hive entrance and a removable tray. Before inserting the cell cup holder, vou use the tray in between hive bodies to fool half of the hive into thinking that they are queenless. You give them a day to get lots of queen cells started then remove the tray for them to finish the job knowing that they are queenright.

With a Cloake Board, the starter and the finisher is one hive.

As an alternative to grafting, you can use various queen rearing cage systems where you confine the queen so that she lays eggs in cell cup holders. In a day or so you should have 100 or more eggs, so you open the cage to release the queen. In three days the eggs will hatch and workers will feed the tiny larvae. You select the best looking ones to go in your cell cup holder to be introduced to the queenless starter bees. The queen rearing cage systems relieve you of the delicate grafting work (and potential injury to the larvae) and you don't have to worry about using larvae that is too old since you know when the queen was laying.

It takes a total of 15 1/2 days from egg lay to an emerging adult queen. Beware that the first queen to emerge may kill her sisters, so a day or two before emergence is expected, you must prepare an appropriate number of queenless mating nucs. The next morning the ripe queen cells go into the mating nucs. If the new queen successfully emerges and survives her mating flight(s), you should have new brood in a couple of weeks. She can stay with the nuc or be caged to introduce into another hive. If she is removed, the nuc will be ready for another queen cell, or it can be combined with another colony.

Good grief!...after reading all that, you are probably ready for Plan B.

Well, if you just want a few queens, there is another option. A "walkaway split" is where you divide a colony and have the bees raise themselves a new queen. They will mature several queen cells and you can carefully remove a few of them to put in mating nucs. Another easy option is to use a special queen rearing box found in the bee supply catalogues. It is a regular deep hive body with entrances on all four sides and dividers to set up as many as four nucleus colonies. If each section gets bees, eggs or tiny larvae, and a frame of stores they will raise a queen. Hopefully, her colony will exhibit all of the desirable traits you were seeking!

#### **January Meeting Notes**

80 members and guests signed in at our January meeting! Larry Hoehne tried to come up with a head count but he said it was like trying to count bees. He figured that there were about 98 in the room and we collected dues from 89 new and renewing members! Be sure to sign in at the meetings since it an important club record.

After social time, Daryl Scott opened our meeting with an invocation and led us in the Pledge of Allegiance. We expect volunteers to help with this role, but again we had no one willing to step up for this important part of our meeting.

Daryl welcomed quite a few first timers that are planning on getting bees in the spring. They are off to a good start and will enjoy the benefits of belonging to the Fort Bend Beekeepers, but he warned them: if you ask a dozen beekeepers a question, be prepared for at least 14 answers. Beekeeping is both an art and a science and there are lots of ways to accomplish our goals. One great benefit is the availability of club-owned equipment for assembling hives, extracting honey, recovering beeswax, etc.

For his January "fun facts" Daryl reported that honey bees are thought to have originated in Asia some 300,000 years ago. While

workers may live only six or eight weeks, the queen's lifespan can be as long as five years. In its lifetime, a worker will fly a distance equal to 1 1/2 times around the earth while contributing 1/12 of a teaspoon of honey to the hive.

Nectar and pollen will soon be in very short supply. Be sure that your hives have adequate stores as they await spring. If necessary, feed 50-50 syrup and pollen patties or pollen substitute. Daryl also suggested that this is a good time to repair or replace equipment.

Secretary-Treasurer Jeff McMullan reviewed our 2016 finances that were included in our January newsletter. A significant highlight was 160 paid members at year end. Jeff also presented the inventory of property owned by the club. Jeff also reminded members of our efforts to work closely with the Fort Bend County Health & Human Services Department as they prepare for mosquito borne illnesses, especially the Zika virus. Hive locations can be registered at https:// surveymonkey.com/r/ FBGCHHSApiaries.

Jeff also informed the group of a theft in Brazoria County: 300 hives! The hives are branded "HHI". Jeff reminded everyone that if hives are branded with a registration number issued by the Texas Apiary Inspection Service, they can be identified across the U.S.

Jeff also discussed parasitic mite syndrome and a management strategy that holds great promise. He has been helping a member who appears to have recently lost hives to pesticides, perhaps bedding plants treated with systemic pesticide. In their consultation with TAIS, inspector Mary Reed pointed out unrelated symptoms of varroa problems. Besides actually seeing mites in photos, she noted bees infected with K-wing virus, a disease transmitted by varroa. Mary's sharp eye led Jeff to focus on a December, 2016 American Bee Journal article entitled "Your Bees Don't Have To Die". The suggested management

strategy is quite simple. Sample frequently for varroa. Infected hives should be treated for mites and requeened with bees proven to show resistance to these obnoxious pests! An important point is that "survival of the fittest" is a bad beekeeping strategy because mites in failed colonies escape the hive on robbers, leading to more infested hives and more colony failures. In closing, Jeff presented a short video showing how to sample for mites.

Gene deBons announced a slate of officer nominations that have agreed to serve. The were seconded and, having no nominations from the floor, the candidates were elected unanimously. Our new officers for 2017 are:

Nancy Hentschel, President Tracey Grimme, Vice President Jeff McMullan, Secretary-Treasurer

Again we have run out of room to announce our door prize winners. Thanks to the donors and congratulations to the lucky winners.

#### Treasurer's Report

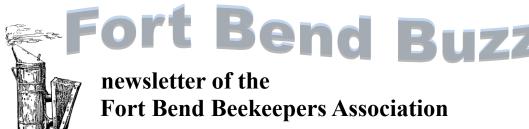
Our January treasury balance was \$2,373.82. We've collected dues from 89 new and renewing members (\$445.00) and received \$15.00 in donations. The resulting treasury balance is \$2,933.82, consisting of \$50.00 in cash for change and \$2,783.82 in our Wells Fargo checking account.



Bome Holladay

Boone Holladay

County Extension Agent– Horticulture Fort Bend County jb.holladay@ag.tamu.edu 281 342-3034 ext. 7034 1402 Band Road, Suite 100 Rosenberg, TX 77471



March, 2017

The March 14, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments while members volunteer to bring snacks. The volunteer signup sheet disappeared again, so if you recall volunteering, don't forget to bring salty or sweet treats. The meeting will be called to order at 7:30 after 30 minutes of social time. Once again, we don't have a volunteer to give our opening invocation. If you can help with this, please see President Nancy Hentschel before the meeting. Perhaps we will need to decide if refreshments and an invocation will continue to be part of our meeting.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** Everyone says that catching swarms is "easy-peasy". I'm really new at all this so it doesn't seem that simple to me. Help!

An A: At this time of the year, honey bee colonies "multiply by dividing". At other times the colony may "abscond", leaving their home because it has become unsuitable. At almost any time of the year bees may vacate their nest if it was in a hollow tree that has fallen over or has become infested by hive beetles or other pests or disease.

When resources are plentiful, the colony prepares for a reproductive swarm. They begin raising queens in "swarm cells" that are usually at the bottom edges for the brood comb. Before the new queen emerges, the old queen leaves with about half the bees to start a new colony. Both the bees that depart and those that stay behind face serious challenges. The bees left queenless have a home and stored resources, but are faced with a challenge: their newly emerged queen must successfully return from one or more mating flights. And for the departing swarm, the search for a new home can be difficult.

The old honey bee queen is not a strong flyer so swarms usually settle near the original hive as scout

bees search out a new nest site. It is a good idea to look around to find where the swarm came from.

It usually takes a couple of days for the scout bees to locate a suitable new home and lead the hungry swarm to its new digs. That usually happens in mid-day so that there is plenty of remaining daylight for the swarm to gather in its new home. It is important that everyone understands that the worst honey bee swarm advice given or received is "don't worry, they'll leave" since they may decide to move into the wall of someone's house.

Capturing a swarm is pretty much the same at any time of the year, but it is important that you approach the task with a plan.

As intimidating as it looks, a honey bee swarm is usually quite docile. But if the scouts have been unable to find a suitable nesting cavity, they may set up housekeeping out in the open or an exposed site with minimum shelter. Winter can be especially rough on these bees. A cluster that appears to be a swarm may include comb with brood and food resources. If you can see comb, it is an established colony and should be approached in a completely different manner: as a removal or rescue. Be aware that it is common for these bees to aggressively defend their home. There needs to be a plan to escape bad bees and destroy the colony if necessary. It is usually a good idea to

regroup, seek advice and recruit reinforcements.

So, if in fact the cluster of bees is a swarm, the goal is to successfully introduce them into a managed hive and have them stay. It is irresponsible to capture a swarm just to have them leave and perhaps end up in a neighbor's house!

The intent is to have the colony settle into a nuc box or brood box. You never use a smoker with a swarm since a key element is having the bees communicate their new location by scent. Smoke in the air is a significant hindrance. Bees find old drawn comb in your nuc to be very attractive. Spraying the frames with sugar syrup helps attract hungry bees, especially if it contains a feeding stimulant. In fact spraying the swarm cluster itself helps too. The bees may be very hungry and the scent of the syrup helps attract stragglers. The syrup is sticky, so it also helps keep the cluster intact until we shake or brush it into a box.

A swarm gathered within easy reach presents little difficulty. If they are on a small limb, you can just use pruners to cut it and carefully shake the bees into your box. Another option is to drop the bees on the ground at the entrance to your box. The bees usually run inside quickly.

If the swarm cluster is high up in a tree, a bucket or water jug on a pole often works, especially if the bees are on a small limb. If it proves impossible to capture the swarm, a backup plan can be to leave the box nearby and count on the bees finding it and moving in on their own.

Sometimes a large number of bees insist on returning to their cluster site. A great trick, attributable to Herman Hoot, is to use insect repellant like Off!. Don't spray bees; just brush them away and spray the spot where they were gathering.

Once you get a number of bees (and hopefully the queen) in your box, you will notice workers near the entrance with their tails in the air fanning their wings. They are sending out scent signals to attract other colony members. When most of the bees are inside, you can secure the entrance and take the box to your beeyard. Stragglers usually go back to where they came from in a day or two. If you leave the box until dark, all the bees usually go inside.

It is very important that the bees don't leave! Feeding them encourages them to stay and a frame of capped brood from another hive (no bees) helps a lot.

Being able to capture swarms is an important beekeeping skill. If you have a hive you must be able to retrieve an errant swarm.

#### **February Meeting Notes**

64 members and guests signed in at our February meeting. The head count came up with 70 so a few folks failed to register. Be sure to sign in at the meetings since it is an important club record.

After social time, President Nancy Henstschel called the meeting to order and asked Vice President Tracey Grimme to give an invocation and lead us in the Pledge of Allegiance. We expect volunteers to help with this role, but again we had no one willing to step up for this important part of our meeting.

Tracey had a few announcements including farmer's market honey sales opportunities at the Harvest Green neighborhood and in Fulshear. She also asked for member help at the Sugar Land Earth Day event on April 1 as well as volunteers to do meeting programs for local community groups. Secretary -Treasurer Jeff McMullan reminded members of upcoming beekeeping schools, including the Feb. 25 classes he will be giving in Angleton. The Central Texas Beekeepers annual school will be held in Brenham on March 25. Registration is limited to 550 and it fills up fast!

Harrison Rogers, our area Director for the Texas Beekeepers Association and Gary Parks, President of the Harris County Beekeepers Association, outlined plans for the upcoming AGVENTURE Honey Bee Exhibit at the Houston Livestock Show and Rodeo. The rodeo runs from March 7 - 26 and the honey bees are one of the most popular stops in the NRG Center. The rodeo expects 2.2 million visitors and 61,000 kids in school groups have registered for an AGVENTURE. Members of area beekeeper clubs volunteer to greet visitors at the honey bee exhibit in shifts from 9:00 am to 3:00 pm and 3:00 pm to 9:00 pm. The day shifts help rodeo guides with kids groups while the evening shift greet families wanting to learn more about honey bees. 160 volunteer shifts need to be filled and members can sign up at the Harris County Beekeepers web site.

Harrison also updated the club on H. B. 1293, a bill filed in the Texas House of Representatives that would amend Texas honey bee law found in Section 131 of the Texas Agriculture Code. He expected the bill to be assigned to the Agriculture and Livestock Committee since the bill was filed by the Committee Chair. A similar effort in 2015 failed to gain any traction due to widespread opposition. The Texas Beekeepers Association says that this year's effort tried to address the concerns from two years ago. Nonetheless, there has been some pretty loud pushback on the bill as it was filed and it will likely be

amended. Probably the most significant opposition to H. B. 1293's wording has come from Bee Weaver Apiaries who've made public their opposition in large part because of the way the bill was drafted without any widespread input or a vote of the Texas Beekeepers Directors who are supposed to represent the membership. When the bill wording is finalized it will be subject to up-or-down votes in committee and before the Texas House and Senate. If it gets that far, it will go to Gov. Abbot and, if he signs it, becomes law. There is almost universal agreement that the current law is poor. Whether H. B. 1293 improves things is subject to considerable debate.

Again we have run out of room to announce our door prize winners. Thanks to the donors and congratulations to the lucky winners.

#### Treasurer's Report

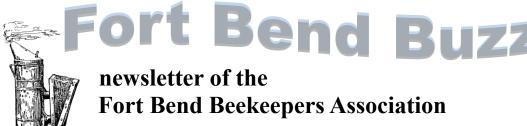
Our February treasury balance had a typo. The correct figure was \$2,833.82, consisting of \$50.00 in cash for change and \$2,783.82 in our Wells Fargo checking account (reported correctly). Since then we collected \$115.00 in dues (23 memberships at \$5.00 each) and paid our \$50.00 club dues to the Texas Beekeepers Association. The resulting balance is \$2,898.82 (\$2,848.82 in our checking account plus \$50.00 cash to make change).



Dome Holladay

Boone Holladay

County Extension Agent– Horticulture Fort Bend County jb.holladay@ag.tamu.edu 281 342-3034 ext. 7034 1402 Band Road, Suite 100 Rosenberg, TX 77471



**April**, 2017

The April 11, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments while members volunteer to bring snacks. Thanks to Stephanie Kinghorn who volunteered to bring salty treats and Glenda McGaughey (something sweet) in April. The meeting will be called to order at 7:30 after 30 minutes of social time (once again, we don't have a volunteer to give our opening invocation). The program for April will be "Maximizing Honey Production" by James and Chari Elam of the Montgomery County Beekeepers Association.

#### Spring Cleaning

It is time to clean up our address list, so please check your address label. If your name is in *italics*, you have not yet paid your dues for 2017 and this is your last Fort Bend Buzz until you do. If you can't make the April meeting, you can mail your \$5.00 check to:

Fort Bend Beekeepers c/o Jeff McMullan 74 Hessenford St. Sugar land, TX 77479

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** I understand that the legislature is changing Texas honey bee laws. Is that something that I should be concerned about?

**An A**: The simple answer to your question is probably "not for the time being". But the old laws haven't gone away.

As you recall from high school civics, a bill is filed by a State Senator or Representative and must be passed by majority vote in both the Senate and House of Representatives in order to go to the governor to be signed. If the governor decides to sign it, the bill becomes the law of the land.

A bill is usually originated by interested parties that must convince a legislator (an elected Representative or a Senator) to sponsor their

desired legislation. If the content of a proposed bill gains a sponsor, it is sent off to the Texas Legislative Council, an agency of the legislature that crafts the words and ideas into a potential law. That process can get complicated because any new bill must be consistent with the pages and pages of existing law, and, of course, it must achieve its intent in its new "legalese" form. If the sponsoring legislator is satisfied with the bill, it is filed and referred to a committee (of the House or Senate) whose job it is to finalize the bill and, if passed by the committee, send it to the full body (House or Senate) for consideration.

Texas beekeeping law can be found in Section 131 of the Texas Agriculture Code. The Texas Beekeepers Association and Texas beekeeping law both got their start in 1901 in response to the threat of American Foulbrood. AFB is an extremely contagious and deadly brood disease of honey bees. It is caused by a spore-forming bacteria that was first described in 1907. The disease is found worldwide and its geographic origin is unknown. The Texas Apiary Inspection Service was organized in 1920 (prior to that time there were both state and local "foulbrood inspectors" in Texas).

AFB control efforts established by Texas law were harsh, focusing on quarantines and burning infected hives to control the disease. Those efforts (perhaps with the help of bees adapting resistance to the disease) have made American Foulbrood a rare problem today.

Beekeeping law in Texas saw its last significant amendments in 1983. Thirty four years later, it remains focused on American Foulbrood and TAIS hive inspections that are required for hives leaving Texas to enter other states.

Today's pest and disease threats to honey bees and beekeeping are far greater than just AFB. Nonetheless, every beekeeper should understand Texas honey bee law in Section 131 of the Agriculture Code even though there is little dispute that it is seriously out of date, largely unenforced and largely unenforceable.

During the 2015 legislative session, the Texas Beekeepers Association drafted provisions to amend Section 131. There was quite an outcry from beekeepers across the state, mostly aimed at existing law that TBA was seeking to fix. There was little time to address all of the concerns, no sponsor was found and the proposed bill went nowhere.

Again in 2017 a group of TBA members drafted changes to Texas beekeeping law and this time a sponsor was found. Rep. Tracy King of Uvalde accepted TBA's proposal and referred it to Legislative Council. When Rep. King filed the bill (HB 1293), beekeepers across the state complained loudly and proposed structural and wording changes could not be made in a timely manner with the legislature in session. TBA withdrew its support for the bill and it is not at all

likely that the bill will leave the House Agriculture and Livestock Committee (chaired by Rep.King). "Not for the time being" is therefore the likely answer to your question.

It has been said though, that if you don't have a seat at the table, you can expect to be on the menu. TBA is still committed to a badly needed update of bee laws in Texas, but, again, it will have to wait until a future legislative session. Hopefully any future draft of new bee law for Texas will be laser-focused on thoughtfully considered and agreed upon objectives. A valid criticism of efforts to fix Section 131 in 2015 and again in 2017 was that there were no stated objectives. Instead, HB 1293 seemed designed to apply to "everyone but me". Every beekeeper in Texas should be anxiously awaiting a clear roadmap of what a new Ag Code Section 131 is intended to accomplish and how success could be measured. It should clearly apply to all Texas beekeep-

#### **March Meeting Notes**

61 members and guests signed in at our March 11 meeting. The head count came up with 67 so again we had a few that failed to register. Be sure to sign in at the meetings since it is an important club record. All that is needed is your name unless you need to update your contact information.

After social time, President Nancy Henstschel called the meeting to order. Dave Grimme gave an invocation and lead us in the Pledge of Allegiance. We expect volunteers to help with this role. If no one volunteers to give an invocation, we will just open our meeting with the Pledge of Allegiance.

Nancy next welcomed first-timers to our meeting. We had nine new members that joined that night! The current dues-paid roster is 131 and there are many that haven't coughed up five bucks for 2017 yet.

Before his presentation, Gene deBons urged everyone to subscribe to beekeeping magazines. He cited

interesting articles from the January, 2017 issue of The American Bee Journal. ABJ offers a subscription discount to bee club members. See Jeff McMullan if you want to take advantage of their offer.

The title of Gene's program was "Life After Death". He described for us how he salvages hive components after a colony dies out, whether it was recently or long ago.

For recent deadouts, he puts frames infested with small hive beetle larvae out on a cement driveway in full sun. The maggots don't get very far before the heat kills them. (Nancy Hentschel also recommended feeding them to the chickens.) Gene puts the frames infested by wax moths out in the yard near a fire ant nest; the ants enjoy feeding on the worms (chickens do too).

Gene brought along a weathered 13 year old hive body from a beeyard he started in Simonton when he first joined the Fort Bend Beekeepers 35 years ago. It had recently been flooded by the Brazos, but was ready for fresh paint and bees.

Gene showed us his rig for recovering old frames: a propane burner and a small steel drum. He uses bricks to hold the frames down in very hot (not boiling) water with a bit of bleach and dishwashing soap. The hot water melts off the wax and propolis followed by a quick scrub with a wire brush and a thorough rinse. With fresh foundation, the frames are ready to go.

As is his custom, Gene cited old references from his book collection. Cyanide was recommended for sanitizing after a foulbrood outbreak. A more recent suggestion was to scorch the inside of the box with a torch after burning the infected frames.

Next, Jeff McMullan reviewed swarm prevention measures and swarm captures. It is swarm season and swarming is a natural process: bees swarm to form a new colony (reproductive swarm) or to vacate a nest site that is no longer suitable (absconding). Swarm prevention includes adding boxes to prevent over crowding, early spring hive manipulation, and making splits.

Over the winter months the honey bee brood nest is moved up into the honey stores as the bees consume their reserves. They leave behind empty comb in the lower box and are not likely to go back down. Moving the box with vacated comb to above the brood nest gives the bees more frames to fill instead of swarming to find more room.

Splitting a hive accomplishes the same thing that bees want to do by swarming. The queenless split will need a queen, so we can introduce a caged queen, use capped queen cells or they can raise their own.

Capturing swarms is not difficult. They can be lured into traps, shook into a box or dumped on the ground to march right inside a nuc.

Again we have run out of room to announce our door prize winners. Thanks to the donors and congratulations to the lucky winners.

#### **Treasurer's Report**

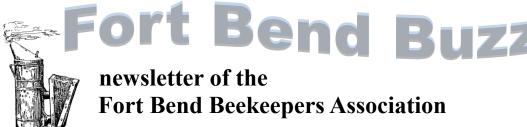
Our March treasury balance was \$2,898.82. At our March meeting we collected \$95.00 in dues (19 memberships at \$5.00 each). The resulting balance is \$2,993.82 (\$2,943.82 in our Wells Fargo checking account plus \$50.00 cash to make change).



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May, 2017

The May 9, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments while members volunteer to bring snacks. Thanks to Arthur Reuter who volunteered to bring sweet treats in May. The meeting will be called to order at 7:30 after 30 minutes of social time (once again, we don't have a volunteer to give our opening invocation). The program for May will be "Top Bar Hive Beekeeping".

#### Spring Cleaning

If you did not receive this newsletter in the mail, it is because you have not yet paid your dues for 2017 and your name is no longer on the mailing list. Our current duespaid membership is at 143!!

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** The topic of varroa mites comes up at every meeting. I don't treat for mites, mostly because I just don't know why or how. Is that really all that bad?

**An A**: In a word: absolutely, and here is why.

Our organization exists to foster safe, responsible, successful beekeeping. It is hardly "success" if some (or maybe even all) of your colonies are dying out year after year.

It is important to understand that wax moths and small hive beetles are opportunist pests that infest weak hives. And weak hives are almost always the result of varroa mite infestation! Deadouts are costly and disappointing and often the reason beekeepers give it up. Small hive beetles make an awful mess and wax worms can actually destroy frames and boxes.

Few of our members actually manage their hives for this destructive pest. Few hands go up when we ask "who treats for varroa"? A better question to ask would be "who

manages for varroa?" since just treating with miticides is no closer to "managing" bee hives than doing nothing at all. Also too, we must understand that deadouts are not responsible beekeeping. When a colony fails due to varroa, the mites don't die. A weak, failing colony cannot defend its hive and robbers soon take advantage of the "free honey". Varroa catch a ride to their next victims, maybe next door in your beeyard, by getting on board

Managing for varroa begins with monitoring for infestation. The least intrusive monitoring is to check how many mites are falling out of the hive through our screened bottom boards. A plastic sign coated with cooking spray will catch falling mites. Large numbers mean heavy infestation, but it is a rough measure so we need to do it often and look for change. Increasing mite drop means increasing mite numbers.

It is better to dislodge and count mites feeding on adult bees. Understand though that for every mite on an adult bee, there may be five or more maturing in capped brood. Doing a "sugar roll" dislodges varroa using powdered sugar. The mites can be counted, but we need a measure of how many bees they were on. We usually use a level 1/2 cup of young bees (nurse bees tending brood). After shaking them into a container, just scoop up a level measuring cup. If you don't shake them down, there will be

about 300 bees. If you spot six mites in the powdered sugar, the hive has 6/300 or 2% infestation. 5% is an absolute call to action!

A better mite measure is obtained from an "alcohol wash". With the sugar roll, the white sugar-dusted bees are returned to their hive where their co-workers quickly clean up the sugar. With an alcohol wash we can count exactly how many bees we have sampled since they are killed by the alcohol. It is critically important that the queen is isolated during sampling since we don't want her to end up dead from our varroa monitoring experiment. Even still, while counting dead bees we should be on the lookout for a queen with a death wish.

Varroa reproduce in capped brood. They prefer drone brood because it takes an extra day to develop. Drone brood is often located on the bottom of brood frames and any drone pupae that are uncovered in your hive inspections should be routinely examined for varroa. Mahogany-colored mites (a little bigger than the period at the end of this sentence) are easily seen on the white drone larva.

Drone foundation is sold to help manage mite numbers. Drone frames are placed on each side of the brood nest and left in the hive for 26 - 30 days. The frame of capped drone brood is then removed and frozen. After an overnight stay in the freezer, the frozen pupae can be removed and examined after uncapping them with a

cappings fork to get a measure of how many pupae were infested. Frozen frames can be returned to the hive for the bees to clean up and start the process again. Be mindful when using drone brood since if it is left in the hive and drones emerge, they will cause a deadly "varroa population explosion".

It is irresponsible to allow a colony to fail due to varroa moving on to infest other bees. The best strategy is to treat for mites when we see high numbers then by requeening with varroa resistant stock.

Beyond using drone frames, our treating options range from relatively non-toxic to in-hive pesticides. Products like Apiguard (thymol gel) or organic acids are not terribly toxic, but use them carefully and only according to label instructions. These products produce vapors to kill the mites, so high day-time temperatures can be bad since too much vapor is released. Treatment is intended to kill adult varroa with a second application after brood (and new varroa) have emerged. The cost for a single deep's two treatments with single foil packs of Apiguard is about \$8 (the cost drops by half when the product is purchased in pails).

Another relatively non toxic product is derived from hops, the brew-master's ingredient. HopGuard II treatment is about \$3.50, but it is less effective and varroa can be expected to quickly develop immunity.

In-hive pesticides are viewed dimly because that may contaminate wax and impact the colony until the drawn comb is replaced. Apistan has been around for years and immunity can be a problem (the active ingredient is tau-fluvalinate, a synthetic pyrethroid). CheckMite+ by Bayer contains a more toxic active ingredient, coumaphos, an organophosphate. It is labeled for both varroa and small hive beetles, but it is no longer available. If you have a stash, you should use it wisely e.g. to treat fresh swarms (with no brood or comb) for varroa as well as small hive beetles.

The active ingredient in recently approved Apivar is amitraz. It is particularly effective against mites and (according to Sharon) is also used to treat dogs heavily infested with ticks.

If your goal is to be treatment-free, a mite infested hive should be treated and then requeened with varroaresistant stock. It is a good idea to read up before deciding on your new queen's geneaology. If mite levels stay low, mite treatments won't be necessary.

#### **April Meeting Notes**

62 members and guests signed in at our April 11 meeting. After 30 minutes social time, President Nancy Henstschel called the meeting to order. Mike McLean volunteered to give an invocation and led us in the Pledge of Allegiance.

Nancy next welcomed first-timers and new members to our meeting. Member Ray Smaistrla announced that he had extra Checkmite+ he would sell at his cost. Next, Darrell Scott demonstrated The Bee Squad Varroa Mite Testing Kit that is available for \$20 from the University of Minnesota book store.

Our program for May was "Maximizing Honey Production" by James and Chari Elam of the Montgomery County Beekeepers. They run Blue Ribbon Honey Co. and operate Bluebonnet Beekeeping Supplies in Willis, Tx.

Commercial beekeepers average more than 100 lbs of honey per hive. For hobby beekeepers, the number is 35 lbs. The basic premise of their presentation was that hobby beekeepers should focus their beekeeping skills on honey production. Each hive should have a young healthy queen as spring arrives. She is "programmed" to build colony numbers and is less likely to swarm. And swarming must be avoided at all costs. Be on the watch for swarm preparations like a skinny queen or backfilling the brood nest with honey. It is almost too late when you see swarm cells. The Elam's kick start their

hives in the spring by feeding 1:1 syrup and pollen substitute. Feeding starts on Valentine's Day and continues right up to the honey flow. As the honey flow begins, remove all meds from the hive and begin supering. Add secondary upper entrances to help boost honey production. Checkerboarding the supers with capped honey seems to really boost production. Add supers when the bees reach 70% capped and uncapped honey. When fall comes around, the bees should have 40 - 60 lbs of honey for the winter. Fall is the best time for requeening since it disrupts varroa reproduction and the colony goes into spring with a healthy young queen. Winter survival depends in large part on varroa numbers. Test/ treat/test! Open feeding of 2:1 syrup and pollen substitute in winter is helpful.

Congratulations to our April door prize winners and thanks to the donors.

#### **Treasurer's Report**

Our April treasury balance was \$2,993.82. Since then we received \$100.00 in donations, collected \$65.00 in dues (13 memberships at \$5.00 each) and spent \$140.00 (honorarium and expenses for our April program). The resulting balance is \$3,018.82 (\$2,968.82 in our Wells Fargo checking account plus \$50.00 in cash to make change).



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fostering safe, responsible, successful beekeeping

**June, 2017** 

The June 13, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments while members volunteer to bring snacks. The meeting will be called to order at 7:30 after 30 minutes of social time. The program for June will be "Dealing with Bad Bees".

#### Dues due?

Our current dues-paid membership is at 155! If you did not receive this newsletter in the mail, it is because you have not yet paid your \$5.00 dues for 2017 and your name is no longer on the mailing list.

#### <u>Ask a dozen beekeepers...</u>

Here is this month's Q (from one of our members) and an A:

**Q:** I've tried my hand at catching a swarm, but they didn't stay. What should I do to improve my success?

An A: This is a very significant question since if the bees from a swarm (or cutout) didn't stay in your hive, they didn't just disappear. They went somewhere and it is not good if they ended up in the wall of your house, or, worse yet, a neighbor's house.

Researchers have shown that honey bees will investigate essentially all possible nearby nest sites and choose the best one, often where bees have lived before. If we bring home feral (wild) bees, it is important that we do everything we can to have them stay in our hive.

Feral honey bees can be a real problem. Often people do nothing about feral colonies of honey bees in neighborhoods. They may not even know that they are there, but sometimes they choose to do nothing because it costs a lot of money to have bees removed. They'll often contact beekeeper clubs for help

with their problem. In fact, virtually all of the help requests coming in to fortbendbeekeepers.org are for "cutouts" of established colonies. Our web site clearly says that we do not vet our members for bee removals or recommend those services, but people are often desperate. Sometimes it is not until the bees start causing trouble that the problem is addressed. Question number one before volunteering to do a cutout: "Are they causing problems?". It is usually best for this work to be left to folks that offer bee removal services, especially if the bees are causing problems. A backup plan to destroy aggressive bees is critical.

It is nature's way for bees to swarm and produce new colonies and our association wants to help deal with nuisance bees. We have swarm traps available through the Extension office that people can borrow so swarms can find a desirable place to call home. When bees show up in the trap, the homeowner contacts the Extension office and we recruit a member to remove them. (Just because they are in our traps doesn't mean that they are sweet bees!)

It is not too difficult to get a swarm or cutout into a hive, but, as you've learned, getting them to stay can present a problem. Here are a few tips that may improve your odds:

Spray the bees and the frames with sugar syrup first. Essential oils in the syrup help create an attractive scent. A drop or two of lemongrass oil in the hive helps too.

Unless it is necessary to maintain decorum, a smoker isn't helpful since we want the bees to communicate their new location with scents, not blocked by the smell of smoke. DEET insect repellent (like Off!) is very effective in preventing bees from returning to their original site (but be very careful not to spray it on bees).

Locate the hive in its permanent site and don't open them up right away: open the hive after dark to keep them inside overnight. Let them wake up in their new home! Feeding may help too if there isn't sufficient nectar available.

Brood to care for helps the bees get established quickly in their new home. Unfortunately, trying to salvage brood from a cutout or trap usually leads to a small hive beetle invasion. A cutout is incredibly disruptive to the colony and beetle adults take advantage of the situation. Once the salvaged brood and/or honey is "slimed" by beetle larvae, the colony will leave for parts unknown leaving the mess behind!

Frames of new foundation or empty top bars should be the last resort for the new colony. Drawn comb and/ or brood is best. A frame of capped brood from another hive works great (no bees). Langstroth frames are interchangeable, but there are no standard dimensions for top bar hives. Honey and pollen in the frame corners is a plus. The only

chore for the new bees is to keep the developing pupae warm and look forward to the coming boost in colony numbers.

A new swarm or cutout presents an opportunity to attack our worst enemy, varroa mites. Mites reproduce in brood (they prefer drone brood) where they are hidden from our varroa treatments. When we give a swarm or cutout brood (hopefully from a hive with low mite numbers), avoid or destroy any drone brood cells and seize the opportunity to treat for the vulnerable varroa that are feeding on the adult bees.

#### **Harvest Time!**

Harvest time is here. Our association has invested over \$650 for the equipment that you will be needing. Members can borrow the setup at a cost of \$20 for a week or so of use. We also require a \$500 deposit check made out to the Association as a hostage to assure its return in a condition ready for the next user.

Jim Lynch is our harvest equipment custodian. He stores it at his office near Hwy 90 and US 59 in Sugar Land. Jim can be contacted at JWLTX@AOL.com or 713 254-3922. The equipment package includes a manual two-frame extractor and stand, a stainless steel double sieve, a serrated uncapping knife, a pin roller uncapper, an uncapping fork, an uncapping tub, and a honey refractometer.

Borrowers need to provide a container for their honey. Lowe's sells five gallon food grade buckets and lids. You can buy plastic "honey gates", valves to make them into a bottling bucket. You'll need a hole saw of the right size that is carefully spaced near the bottom of the bucket with room to tighten the honey gate into place. An important trick is to heat around the hole with a hair dryer or heat gun (or very very carefully using a propane torch). It softens the plastic so that the bucket can conform to the gate without cracking. (Cracks often appear later if you don't do this!)

#### **May Meeting Notes**

We had an all time record of 74 members and guests signed in at our May 9 meeting! After 30 minutes social time, President Nancy Hentschel called the meeting to order and welcomed first-timers and new members.

Our program for May was "Top Bar Hive Beekeeping" by Tom and Connie Elliott who have been helping member Jerzy Trybek get started with a top bar hive. Jerzy has been keeping bees in several Langstroth hives and wanted to give a TBH a try.

Instead of the Langstroth hive's standard rectangular frames with beeswax or plastic foundation, the TBH has a series of foundationless top bars arranged in a characteristically shaped horizontal hive. Each top bar has a spline or rib down its center to encourage the bees to build parallel sheets of comb suspended from the removable bars. The Elliott's use the 45" long Carr-Bradford hive design they found on the internet. It requires 29 top bars with 3/8" wide wooden beeswax coated splines glued into a dado in each top bar. Oher top bar designs use strips of plastic foundation or make the cross-section shape of the bar to include the spline.

The TBH itself has angled sides intended to encourage the bees to attach their comb only to the top bars. The beekeeper manipulates the bars to meet the bees needs for brood rearing or storing nectar and honey. As a hive is being established it is very important to keep a close eye out for "cross-combing" or it will be impossible to remove the bars of comb. Unsupported comb, especially new white wax or comb heavily laden with honey is very very fragile. Probably the most significant TBH challenge in our area is comb weakened by our incredibly hot summer days.

Honey produced by TBH bees is crushed and strained to harvest, so you get a lot more wax to deal with. But the real advantage according to local TBH guru Dean Cook is that with a TBH "you can harvest honey with the biscuits in the oven!".

Following the Elliott's presentation, Texas Beekeeper Association District Director Harrison Rogers reminded everyone of the June 10 Summer Clinic to be held in Arlington. The keynote program includes presentations by Randy Oliver (scientificbeekeeping. com), a frequent contributor to the American Bee Journal.

Before closing, member Gina Walker recommended an internet resource that she found: girlnextdoorhoney.com. She ordered a set of educational posters that she offered to share if someone is giving a presentation.

Congratulations to our May door prize winners and thanks to the donors.

#### **Treasurer's Report**

Our May treasury balance was 3,018.82. Since then we received \$210.00 in donations, collected \$55.00 in dues (11 memberships at \$5.00 each) and received \$20.00 for the use of the club's harvest equipment. We spent \$150.00 for our May meeting speaker expenses. The resulting balance is \$3,153.82 consisting of \$3,253.82 in our Wells Fargo checking account less a \$150.00 outstanding check plus \$50.00 in cash to make change.



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# Fort Bend Buzz

# newsletter of the Fort Bend Beekeepers Association

fostering safe, responsible, successful beekeeping

**July, 2017** 

The July 11, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Our meeting program topic will be "staying cool at harvest time". Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments (if a volunteer will make it and clean up afterwards). Members can also volunteer to bring snacks. The meeting will be called to order at 7:30 after 30 minutes of social time. If you would like to be part of the FBBA Swarm Call List, Honey Product For Sale List, Community Outreach Committee and the Hospitality Committee, please complete this survey at https://www.surveymonkey.com/r/5FMYLWT.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** Ok, I get the message. Just ignoring varroa mites in my hives is a bad idea. I've been reading up on treatment options and want to know more about oxalic acid for varroa mites.

**An A**: Let's work our way to an answer for you: the most powerful measure of successful beekeeping is colony survival. At every turn we are told to keep "strong, healthy hives". In our area, two things play an important role here. This time of the year our swarm management effort is put to the test. If your bees swarm, there is a significant chance that the hive's new queen won't return successfully from her mating flight. If a new queen has to make multiple mating flights for some reason, the odds favor her being eaten somewhere along the way by a purple martin, or a dragonfly, or a spider, or a green lizard, etc. etc.

Summer hive inspection for queenlessness (if that is a word) is important. If it appears that there is no queen, you can buy a new queen or give them a frame with eggs or very tiny brood so that they can raise their own new queen. You may be unsure, but the bees know if they need to raise a new queen!

What does all that have to do with varroa mites and oxalic acid? Actually, a lot. Varroa mites reproduce in capped brood. They are hidden from mite treatments in the capped cells, so most mite treatment options are intended to first kill the mites feeding on adult bees (called their phoretic stage). An extended treatment period or second treatment is aimed at killing the new mites that emerge with new adult bees. This is important because for each phoretic mite there may be four or more mites in their "reproductive stage" (protected with capped brood).

Like a newly captured swarm, a queenless (and broodless) hive is a perfect target for really successful mite treatment. Most treatments require that you remove the honey supers. If there are still a lot of bees, you may need to give them an empty super (with foundation or drawn comb) to use. If you have room for them, the honey supers can be safely stored in the freezer and returned to the hive stack after a day or so to warm back up. The problem is that our weather may be too hot for mite treatments, especially products that vaporize in the hive. The bees work hard to manage the temperature inside the hive and hot days and high humidity obviously make that job more difficult. And conditions that make mite treatment vaporize too quickly aren't good. If your hive is queenless (perhaps due to swarming), it is decision time for dealing with mites. Should I do it now or wait for cooler weather? It all depends on your treatment selection.

If you got this far, you're definitely still "reading up". Oxalic acid is a relatively strong organic acid that is found in many plants and vegetables. It is in honey as well. Its principle consumer use is as "wood bleach" found in paint stores.

The EPA approved oxalic acid for varroa treatment under an expedited application made by the USDA Agricultural Research Service. OA had been used in Europe and Canada for many years. It was approved for in-hive varroa treatment in Canada in 2010 and the EPA relied in part on the prior Canadian approval for their expedited ok. Oxalic acid is corrosive to the eyes and skin, so it carries the EPA "Danger" label. Long sleeved shirt and long pants, gloves, a respirator and goggles are required for its use. It can be acutely toxic to bees if used improperly. However, if used properly at correct treatment rates it has minimal adverse effect on adult bees.

Oxalic acid is approved in a sugar solution as a spray for package bees or for a measured trickle between frames in the hive. It can also be used as a vapor. It is sublimated (heated up to go from solid crystals to a vapor) by a vaporizer available at bee supply stores or on the internet. It is not likely that miticide products using oxalic acid will be available to beekeepers since it is cheap and relatively available and product registration is costly. Scientificbeekeeping.com is a great resource for you....keep reading!!

#### **June Meeting Notes**

We had 81 members and guests that signed in at our June 13 meeting. It tied the record set at last month's meeting, but a rough head count came up with 95! Everyone is reminded that the sign in sheets on the back table at our meeting are an important club record that supports our use of County facilities.

After 30 minutes of social time, President Nancy Hentschel called the meeting to order and opened with the Pledge of Allegiance.

Our program for June was "Dealing with Bad Bees" by Jeff McMullan. Jeff opened his program by proclaiming that "Life is too short to put up with mean bees!" while showing a photo of long time member and past President, 97-year-old Elton Reynolds. Jeff asserted that Elton stands by his declaration!

It is very important to always be safe around bees. Their behavior can be far different from one day to the next. Be especially mindful of neighbors, pets and the public. Wear protective gear and light your smoker. Always have a backup plan for aggressive behavior.

Aggressive behavior is an alarm response programed into honey bees as an organized colony defense. It is triggered by an alarm scent (pheromone) emitted by guard bees or any alerted or stinging worker. Be very careful not to crush any bees as you work your hives. If you accidently crush a bee or get stung, quickly hide the alarm scent with smoke.

Solitary foragers or swarms seldom react defensively while the level of hive defense can depend on environmental factors and/or genetics. Gentle behavior is an important factor in beekeeping and honey bee breeding. Defensive behavior increases with colony population. During dearth (no nectar flow), there are more bees "at home" and they have greater sensitivity to disturbance since other bees may try to rob their honey stores. Quick

movements, dark colors, strong scents, vibrations or noise can all trigger a defensive response. Defensive behavior is greater at dusk and after dark. (Remember that bees can't see red colors. A red flashlight should be used when moving bees after dark.)

Beekeepers have long observed that unsettled weather can stimulate defensive behavior. Honey bee scientists have studied sting behavior too and found that weather conditions of high temperature, low wind, full sun and high barometric pressure increase stinging behavior. Select your hive location carefully. Scientists have found that European Honey Bees have a "red alert zone" within 2 meters of their hive where a defensive response to intruders should be expected. There is a "caution zone" out to 10 meters where European bees are usually ok unless they've been previously disturbed. Beyond 30 meters, no defensive behavior is expected, but BEWARE! Africanized hives may attack 10x as far away by 10x as many bees!

A hive can get mean for lots of reasons like the disturbances or environmental factors above. Queenless hives are loud and often more aggressive. A failing queen or a new queen with bad genetics can also change the hive's behavior. Africanized swarms can invade and take over a previously sweet hive.

It is very important that beekeepers address bad bee problems before there are bad outcomes. Identify the cause and remedy the situation if possible. Requeening with better, gentler stock may be a good idea even if the colony seems to calm back down. In the worst case, bad bees should be destroyed.

Requeening bad bees can be difficult. For back yard beekeepers it is usually best to temporarily relocate the hive after dark to a rural setting where risk of causing problems is lower. Expect it to take several attempts to find a bad queen since they often aggressively attack the front of your veil because of the scents given off in your breath. They quickly make it almost impossible to see to find the queen. Enlist other beekeepers to help. Set boxes aside using plastic signs to keep those bees inside as you search others. Start your search with the most likely frame in the most likely box. You can also try splitting the hive into several boxes. The split with the queen should not be as loud and agitated as the others.

When she's been found, squish the old queen and drop her down in the hive. Stack it all back up and introduce the new queen on the next day. The good news is that, once requeened, bad hives often calm down within a few days.

Thanks to the June door prize donors and congratulations to the lucky winners.

#### Treasurer's Report

Our June treasury balance was \$3,153.82. Since then we received \$90.00 in donations and collected \$35.00 in dues (7 memberships at \$5.00 each). We spent \$155.88 for a new web site platform, \$11.90 for a new roll of door prize tickets and \$14.06 for spare batteries for our PA system. The resulting balance is \$3,096.98 consisting of \$3,352.86 in our Wells Fargo checking account less \$305.88 in outstanding checks plus \$50.00 in cash to make change.



Dome Holladay

Boone Holladay

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# Fort Bend Buzz

### newsletter of the Fort Bend Beekeepers Association

fostering safe, responsible, successful beekeeping

August, 2017

The August 8, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Our meeting program topic will be an update from Jerzey Trybek on his top bar hive plus a quick look at oxalic acid, recently approved for in hive control of varroa mites. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments. (If you arrive early, please volunteer to start the coffee.) Members can also volunteer to bring snacks. The meeting will be called to order at 7:30 after 30 minutes of social time.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** This afternoon the whole front of my hive is covered with bees! Are they getting ready to swarm? What should I do?

An A: It's pretty scary looking isn't it? Your bees are "bearding" and in our area it is pretty common this time of the year. They are not likely to swarm since, like all of us, they're probably just trying to cope with the hot, humid weather.

It's called bearding because it looks like the "bee bearding" demonstration that is pretty scary looking too. It is not for everyone since a beekeeper wears a caged queen under their chin and allows bees to gather on their face until it looks like a beard. In your case, the beard is on the front of your hive. You'd probably rather have it there!

This behavior has to do with the temperature inside the hive, colony numbers and hive ventilation. The bees will usually begin gathering at mid-day and often spend the night outside in large numbers. Sometimes the "beard" is there all day. It is just too hot and crowded for them inside. Another factor is that nectar and pollen resources are beginning to dwindle, so the foragers that would be out and about are just hanging out at the hive, but it is just too hot inside.

Honey bees keep the hive at about 92°F for successful brood rearing.

In cold weather they flex their flight muscles to generate heat. When it gets hot, they regulate the temperature by ventilating the hive and bringing in water. As the water droplets evaporate, it soaks up heat. A colony may bring in up to a quart of water every day, so make sure that they have a reliable source nearby. High humidity hampers this cooling a lot: they use "swamp coolers" in Midland, not Houston.

We need to make sure that the bees have enough room and adequate ventilation. You may need to add another super just to give the bees room to gather inside the hive. Screened bottom boards for varroa mites help increase ventilation. Many beekeepers use a screened inner cover as well. Propping up the hive cover helps hot air escape too, but don't open it up to rainfall. If you have a conventional inner cover under a telescoping cover you should check that the bees haven't propolized the hole shut. If they have, open it back up. Some inner covers have a notch in them for air flow that requires the telescoping cover to be positioned forward or back to control air movement. Make sure it is open. If there is a solid bottom board and entrance reducer, removing the reducer allows for more air flow too, but beware of robbing, especially during a dearth.

Shading the hive from the afternoon sun helps. The metal top on some telescoping covers gets incredibly hot and a plastic sign on top (with a brick to keep it from blowing away) helps a lot. Dark colored paint soaks up heat too, so most hives are painted white.

Beware! Bearding is sometimes a symptom of a coming disaster! Bearding behavior and an unpleasant smell (like rotting fruit) can be symptoms of small hive beetle larvae beginning to feed on honey and brood. It is unpleasant, so the bees just stay outside. Late summer is prime hive beetle time in our area and an infestation can cause the bees to eventually abscond, leaving the pests and their slime behind.

Fields of yellow blooms are right around the corner and don't confuse the smell of ripening goldenrod honey for the rotten smell of fermenting honey caused by beetle maggots. The odor has been described as like a junior high locker room! If you walk among hives in late summer, it will be apparent which ones have started to bring in goldenrod nectar.

Bees swarm to form new colonies. Reproductive swarms usually happen in the spring when resources are plentiful. At any time of the year they may flee an unsuitable nest site, so you are correct in being concerned. Sometimes absconding happens when the bees have chosen a home in the spring that proves to be too hot for them in summer. Hive beetle maggots are a pretty good reason to leave too. The whole colony is taking flight, so swarms this time of the year can be huge.

#### **July Meeting Notes**

Be sure that you register at the back table at our meetings since the sign in sheets are an important club record that supports our use of County facilities. We had 68 members and guests that signed in on July 11.

After 30 minutes of social time, President Nancy Hentschel called the meeting to order and opened with the Pledge of Allegiance.

It is hotter than blue blazes and Tracey Grimme presented ways to keep cool. The following list of tips were shared with the group:

- 1. Wear a bike bladder filled with ice under you bee suit.
- 2. Put frozen water bottles in your pockets.
- 3. Wear an "instant cooling shirt" designed to evaporate sweat more efficiently.
- 4. Wet towel around your neck.
- 5. Buy a breathable bee suit-more expensive, but well worth it if you have a lot of hives.
- 6. Use a cooling vest which stays cool about two hours after taking out of freezer and putting it on.

Of course you should always plan your beeyard chores with an early morning start so you can finish up ahead of the worst of the heat.

Tracey also reported that we have a webmaster! Arthur Reuter has volunteered to update and maintain the club's website. The past several months he has been working with the officers to choose a new format. The goal of the FBBA website is to be user friendly and provide information for the public and club members. A sneak preview was given at the July meeting. The updated website should be ready within the next couple months.

It is harvest time and Jim Lynch brought in the club's honey extraction equipment that can be borrowed at a cost of \$20. We also require a \$500 deposit check as hostage. The check is returned when the equipment comes back (we have over \$600 invested!)

Our setup includes uncapping tools, an uncapping tray and an extractor. It is a tangential design and is a little slow since it handles just two frames at the time. "Tangential" means that the frames are parallel to the sides of the drum. It is important to extract in steps since only the honey toward the outside is removed (the weight of the honey trapped to the inside can destroy the comb and make an awful mess). After uncapping, extract about half of the honey from one side before reversing it to empty the other side. Then reverse it again to finish the

The setup includes a two-stage honey sieve that fits in your five gallon bucket (members need to have a pail for their honey). They sell white food grade buckets and lids at Lowe's. You should pick up a bucket opener at the same time to make removing the lid easy. It is a good idea to buy a "honey gate" too; it is a valve you install in your bucket to make bottling easy. You'll need to drill a hole for the honey gate. It is a good idea to soften the plastic with a heat gun or hair drier before installation. Buckets of honey should set in a warm place for a day or two to let all the bubbles, bits of wax, etc. to rise to the top. When bottled, it should be crystal clear.

We bought the setup in 2011 after much discussion. The club owned an extractor many years ago and it quickly disappeared. We didn't want that to happen again, so an important consideration was to have a member responsible for the setup along with a hostage to make sure it gets back. Many thanks to Jim Lynch for stepping up for this important role.

The two-frame manual extractor has limitations, but it will fit in the back seat of a Camry. Larger extractors are "radial", meaning the frames are radially aligned from the basket axle so all the frame swapping is not necessary. The drum of a radial extractor is much larger which presents a problem for equipment intended to be moved around.

A recent addition is a honey refractometer so you can measure the moisture content of your honey. To prevent fermentation, the moisture in nectar is removed by air movement through the hive. When the bees have the moisture content low enough, the honey is capped. You should only extract capped honey since the bees are the best judge of moisture. Before extracting, check the moisture content and be sure that it doesn't increase as you extract.

The July meeting included an open discussion of small hive beetle control. Various trapping devices were reviewed. Everyone is reminded that essential oils used in hives can be toxic to bees and any pesticides must be used in accordance with label directions.

Thanks to our July door prize donors and congratulations to the lucky winners.

#### Treasurer's Report

Our July treasury balance was \$3,096.98. Since then we received \$40.00 for the use of the club's extractor setup and collected \$15.00 in dues (3 memberships at \$5.00 each). The resulting balance is \$3,151.98 consisting of \$3,101.98 in our Wells Fargo checking account plus \$50.00 in cash to make change.



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fostering safe, responsible, successful beekeeping



The September 12, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments. (If you arrive early, please volunteer to start the coffee.) Members can also volunteer to bring snacks. The meeting will be called to order at 7:30 after 30 minutes of social time.

#### Ask a dozen beekeepers...

Our newsletter is abbreviated because there is so much cleanup and relief work to be done because of Hurricane Harvey flooding. This month we're "asking a dozen beckeepers" (or even more) to help others get back on their feet! Cash or other donations are helpful, but not nearly as valuable as your time and energy helping others.

#### **August Meeting Notes**

Be sure that you register at the back table at our meetings since the sign in sheets are an important club record that supports our use of County facilities. We had 39 members and guests that signed in on August 8. Attendance seemed low probably due to end of summer travels.

Both President Nancy Hentschel and VP Tracey Grimme were out of town, so Secretary Treasurer Jeff McMullan called the meeting to order and opened with the Pledge of Allegiance. After welcoming guests, Jeff reported on his Rasberry crazy ant research. His investigation of foraging behavior revealed a strong preference for sugar syrup so we need to be careful about attracting crazy ants when feeding bees. These ants are what is called a "tramp" species, meaning that they expand their range like hobos, moved about by human activity. Any new beeyard location can be easily checked for crazy ants using a small slice of hot dog. It is best to avoid moving hives from yards with crazy ants present since hitchhikers are likely to come along and infest

the new location.

Our next topic was oxalic acid for varroa mite control. OA has been used successfully for many years in Europe and was recently approved for use in the U.S. It can be applied by the "dribble" method which involves pouring a prescribed dose of sugar syrup/oxalic acid solution between frames. Another application method is the oxalic acid vaporizer that uses a heated cup to vaporize a measured dose of acid cystals inside the hive. The proper term is "sublimes" which means going from a solid, not a liquid, to a vapor. A 12V battery is used to power the vaporizer. There are many YouTube videos on vaporizer use and many different models are available for sale on the internet. Jeff presented a short video of Brazoria County Beekeeper Jack Berry using a Vaporox vapor-

Varroa reproduce on brood in capped cells. They prefer drone brood since it is more robust and has a longer capped period. Neither dribbling or vaporizing kills reproducing mites or offer long term control so, like other varroa treatments, additional OA doses are needed to kill mites that later emerge with the adult bees.

In a January, 2017 American Bee Journal article, Randy Oliver (scientificbeekeeping.com) reported on ongoing work to develop an extended release OA treatment. Oxalic acid is really cheap so it is unlikely that a private company would develop such a product. It is simply

a blue paper shop towel saturated with an OA/glycerin solution.

Next, Jerzey Trybek presented a great update on his top bar hive beekeeping as a follow up to our May meeting. The hive was established from a cutout on May 1 and he showed many frame-by-frame photos of his booming hive as well as a GoPro video that he uses to record inspections to document later.

Thanks to our August door prize donors and congratulations to the lucky winners.

#### **Treasurer's Report**

Our August treasury balance was \$3,151.98. Since then we collected \$10.00 in dues (2 memberships at \$5.00 each). The resulting balance is \$3,161.98 consisting of \$3,101.98 in our Wells Fargo checking account plus \$60.00 in cash to make change.



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# Fort Bend Buzz

### newsletter of the Fort Bend Beekeepers Association

fostering safe, responsible, successful beekeeping

October, 2017

The October 10, 2017 meeting of the Fort Bend Beekeepers will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. Our meeting program topic will be honey crystallization by Gene deBons. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments. (If you arrive early, please volunteer to start the coffee.) Members can also volunteer to bring snacks. The meeting will be called to order at 7:30 after 30 minutes of social time.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

Q: We just harvested our first honey crop and I have far more than we can eat or maybe even give away! Selling a few jars would help pay for my "habit". What is the easiest way to make that happen?

An A: Honey bees will for age two miles or more from their home to gather sweet liquids (usually the nectar from flowers) to be made into honey. Their efforts usually yield far more honey than the bees would need for food in winter or for times when nectar is scarce. We harvest this excess, extract it from the beeswax comb and bottle and label it for sale or gifts to neighbors, friends and family. This process also yields beeswax for use in making candles, cosmetics, etc.

Many see a health benefit in consuming "local honey" produced from local floral sources. These sources can be neighborhood land-scape plantings or naturally growing wild flowers, flowering trees, shrubs and vines. In our area, the natural range of flowering plants is very large, so "local" can mean a wide area so long as the floral sources are consistent. This is significantly different in mountainous areas where elevation (and plant species) can change a lot in just a few miles.

As you know, the club owns an extractor setup that members can bor-

row. We require a security deposit and \$20 donation for its use. You have to provide a container for the extracted honey, but a clean food grade plastic pail and lid from Lowe's works well (be sure to buy a pail opener too or you will have a rough time getting it back open). A "honey gate" from a bee supply house is all that's needed to turn your pail into a bottling bucket.

It is a good idea to let the honey set for a few days in a warm place before bottling. Bubbles, bits of wax, etc. float to the top and your honey gets crystal clear. You can order honey containers or just use canning jars from the grocery store. Another option is to contact member Peg Turrentine who has a local source for glass containers.

Your honey is significantly different than "grocery store" kind. First of all, it is from local floral sources (most store bought honey is imported). All honey will eventually crystallize. Commercial packagers are concerned with a long shelf life since crystallized honey on the store shelf will not sell well. The best way to delay crystallization is to heat the honey and filter out all of the sugar crystals, pollen or wax. These tiny solid particles will become nuclei for sugar crystals.

Sale of food, including honey, for human consumption is regulated in the interest of public health and safety. The Texas AgriLife Extension Service document "Selling Honey in Texas" describes requirements for honey sales, including by

individual beekeepers. You should carefully read and understand this document. Under the law, beekeepers who are "small honey producers" can sell pure honey (with no added ingredients) so long as very specific requirements are met, including hive ownership and management, labeling, and the place and nature of the sale transaction. Small honey producers are exempted from local regulation and any other food safety requirements. If honey is to be used as an ingredient in other products to be sold, offered for later retail sale or sold across state lines (or on the internet) it must have been produced in a facility licensed and inspected by the Texas Department of State Health Services and registered for traceability by the U. S. Food and Drug Administration. Local food safety rules may also apply.

We all agree that a beekeeper's honey crop is special and local honey is a better choice than imported stuff at the grocery store. Our web site (fortbendbeekeepers.org) lists members with honey for sale. You can sign up by emailing info@fortbendbeekeepers.org.

#### **Election Time**

We plan to elect officers for 2018 at our November meeting. Volunteering to help and taking a leadership role are important to our organization. Please contact Gene deBons for details if you can serve (home 281 341-7135, office 979 793-2900 or help@fortbendbeekeepers.org).

#### **September Meeting Notes**

Be sure that you register at the back table at our meetings since the sign in sheets are an important club record that supports our use of County facilities. We had 50 members and guests that signed in at our September meeting.

After 30 minutes of social time, President Nancy Hentschel called the meeting to order. Vice President Tracey Grimme gave an invocation and led us in the Pledge of Allegiance.

Tracey noted that the Brazos Valley Beekeepers Fall 2017 Bee School is scheduled for September 23 at the Agricultural and Life Sciences Building at Texas A&M. Also on the calendar is the Texas Beekeepers Association 2017 Annual Convention, November 9 - 11 at the Frank Mayborn Event & Convention Center in Temple, Texas. Registration is on the TBA website: texasbeekeepers.org.

Tracey also announced the ongoing 2017 North American Mite-A-Thon, September 9 - 16, 2017. This is a national effort to collect data on varroa infestation across North America in this one week window. All beekeepers are asked to participate by sampling hives for varroa using either the sugar roll or alcohol wash protocol. This is a program of the Pollinator Partnership, an organanization concerned with conservation, education and research to promote the health of pollinators. The Mite-A-Thon intent is to raise awareness of varroa monitoring methods and to encourage all beekeepers to monitor for mites and know the management strategies that are available.

Courtney Gremmel from the Fort Bend County Health and Human Services Department gave us an update on Fort Bend County's mosquito control efforts. There has been high public interest in controlling mosquitoes because of remnant standing water in areas affected by Hurricane Harvey. Beekeepers are concerned about the impact of spraying to kill adult mosquitos. Many government and private organizations, as well as individual homeowners, spray insecticides to control mosquitos. In the wake of Harvey, there has been much said about aerial spraying in the area for mosquitos. At the present time, Fort Bend County does not anticipate the need for such drastic mosquito control measures (the Road and Bridge Department uses ultra low volume truck mounted equipment to kill adult mosquitos).

By transmitting disease, mosquitos cause more human suffering than any other organism. Fort Bend County's mosquito control effort is solely focused on preventing the spread of mosquito transmitted disease (not for nuisance mosquito problems). Spray decisions are based on trapping data. Mosquito traps are set out on Mondays and collected on Tuesdays. Captured mosquitos are sent to the Texas Department of State Health Services to determine if infected mosquitos are present. If test results are positive, truck mounted spraying is prescribed for three consecutive evenings, then retesting to determine if the control effort was successful.

Courtney reported that trap counts remain low and no reports of disease carrying mosquitoes from the State DSHS Lab have been received. Based on these factors, Fort Bend County does not perceive a widespread public health threat at this time and aerial spraying is not anticipated.

The Fort Bend County Health and Human Services maintains a voluntary Apiary Registration. Beekeepers can register their hives at:

https://www.surveymonkey.com/r/FBCHHSApiaries

In the unlikely event that aerial spraying would be necessary, beekeepers will be notified ahead of time.

Member Jerry Griffin confessed to perhaps having more money than sense. Nonetheless, he reported on his recent purchase of a Bee Cool solar powered hive ventilator. It goes below the top cover and a thermostat controls a ventilating fan. The fan draws air up through hive and out the top of ventilator through built in vents. The jury is still out, but Jerry reports a whole lot less bearding (and a lighter wallet).

Jack Richardson gave a presentation on old-time beekeeping. Sections of a hollow log, "bee gums", were used as hives. Later, boxes were built of sawmill reject lumber. Cross pieces in the center supported the brood nest while honey comb was suspended from the top cover. To populate the hive, it was placed on an old sheet. A swarm clinging to a branch was carefully cut then shaken out in front of the box. As many of us have seen for ourselves, the bees dutifully march inside. Many old-timers are still of the opinion that bees moving in on their own are most likely to stay.

Thanks to our door prize donors and congratulations to the winners.

#### Treasurer's Report

Our September treasury balance was \$3,161.98. Since then we received a \$25.00 donation and collected \$15.00 in dues (3 memberships at \$5.00 each). The resulting balance is \$3,201.98 consisting of \$3,151.98 in our Wells Fargo checking account plus \$50.00 in cash to make change.



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# Fort Bend Buzz

# newsletter of the Fort Bend Beekeepers Association

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November, 2017

The Fort Bend Beekeepers don't meet in December, so our November 14 meeting is the last one for 2017. It will be held at 7:00 pm in Fort Bend County's "Bud" O'Shieles Community Center, 1330 Band Rd., Rosenberg, Texas. For our meeting program, Gene deBons will be discussing properties and the processing of beeswax. Our November meeting is probably our most important meeting of the year since our plan is to elect officers for the coming year. Visitors (and new members) are always welcome (membership dues are \$5.00 for the calendar year). The Association provides coffee and lemonade for meeting refreshments. (If you arrive early, please volunteer to start the coffee.) Members can also bring snacks to share. The meeting will be called to order at 7:30 after 30 minutes of social time.

#### Ask a dozen beekeepers...

Here is this month's Q (from one of our members) and an A:

**Q:** I'm worried about one of my hives. The others seem to be doing fine as winter approaches, but this one seems to be queenless. There is no brood and I can't find a queen. Otherwise they seem to be ok. I've called around looking for a new queen but I guess that it is too late in the year. What should I do?

An A: With winter just around the corner, honey bees are busy with their final preparations and it is good that you are observing their progress. Adequate honey resources are especially important during cold weather since bees stay warm by forming tight clusters inside the hive and flexing their flight muscles to generate heat. This burns a lot of "fuel". They will also be needing protein rich pollen stores to start brood rearing in early spring; they need to have a work force ready for the coming blooms. The beekeeper's varroa management is important too, lowering the parasitic burden and increasing winter survivability.

Since their role has been fulfilled for the year, the colony ejects drones to conserve stores (their replacements will be raised in early spring). The queen also slows her egg laying and worker numbers drop as cold weather approaches. There needs to be enough bees to maintain their winter cluster but each one is a mouth to be fed.

It is indeed too late in the year to be shopping for a queen. Soon, if not already, drones will have been ejected and a new virgin queen would have a very difficult time finding mating partners.

Your hive is not necessarily queenless since it is not all that unusual for brood rearing to stop completely as winter approaches. It would seem that colony survival would be better served if there were always just a few eggs around so the bees could raise a new queen in an emergency, but the lack of drones makes that strategy unlikely to succeed.

It is better to leave the hive closed with cold weather approaching, but if we have a nice warm fall day, you can give finding the queen another go. If you don't see her, you can give them a frame of brood from another hive. With eggs or tiny larvae available they can try to raise a new queen. A queenless colony will have capped queen cells after 10 days. You can check if the weather cooperates again. After that, keep your fingers crossed.

If the colony does ok through the winter, you can check for brood in early spring (again with cooperating weather). Introducing a brood frame at that time gives them a chance to raise a queen before a new one is available for purchase.

If you are convinced that the hive is queenless and it appears that they will not likely to survive winter, you can combine the bees with another colony. A "newspaper combine" is easy to do.

One final word of caution: hive inspections this time of the year should be avoided except on warm still nice days when activity is good at the entrance.

#### **Election Time**

We plan to elect officers for 2018 at our November meeting. Volunteering to help and taking a leadership role are important to our organization. Please contact Gene deBons for details if you can serve (home 281 341-7135, office 979 793-2900 or help@fortbendbeekeepers.org).

#### **October Meeting Notes**

Be sure that you register at the back table at our meetings since the sign in sheets are an important club record that supports our use of County facilities. We had 53 members and guests that signed in at our October meeting.

After 30 minutes of social time, President Nancy Hentschel called the meeting to order. Vice President Tracey Grimme gave an invocation and led us in the Pledge of Allegiance.

First up was Harrison Rogers, a club member and District 5 Director of the Texas Beekeepers Association. He reminded everyone of the upcoming TBA annual convention, November 9 - 11 in Temple, Texas. The event promises a full agenda of

presentations and educational sessions. Keynote speakers include Dr. Dewey M. Caron, Jerry Hayes, and Jennifer Berry.

Gene deBons has again volunteered to seek nominations for our officer elections planned for the November meeting. It is our last meeting of the year and incoming officers will be ready for a fresh start in January. At this point the list of nominees is still incomplete.

Gene also gave the October program, all because of Alan L'Roy. Gene has been helping Alan with his bees and he showed up in August with a jar of honey that had crystallized almost overnight. "What did I do wrong?", he asked. The immediate response was "did you put it in the refrigerator?" since that would cause the problem. Alan was vindicated since his honey had been stored properly. Gene wasn't satisfied telling Alan that all honey will eventually "sugar" so he thoroughly researched the topic for our October meeting program.

In Europe, most honey is consumed as "creamed honey" produced by managing natural crystallization of the sugars in honey. Rather than large crystals and the consistency of sweet beach sand, this honey has the texture and spreadable consistency of peanut butter. Yum! Creamed honey is just crystallized honey, it doesn't contain cream. Some of our members produce creamed honey and report a good demand. Unfortunately, many honey customers see granulated honey as having "gone bad" despite the fact that honey never spoils so long as it does not ferment because its moisture content is too high.

There are three major sugars in nectar and honey: sucrose (e.g. table sugar), glucose (e.g. corn sugar from corn starch) and fructose (e.g. fruit sugar). It gets confusing because they all go by several different names. We'll try to stick with these three.

American honey averages 17.70% water, 40.50% fructose, 34.02% glucose and 1.90% sucrose. Other

ingredients are the various minor components found in the nectar source.

You may have noticed that the sucrose (table sugar) in honey is low compared to the other two sugars. This is due to the "miracle of honey": in processing nectar (and sugar syrup), honey bees introduce an enzyme (invertase) that breaks the sucrose down into two simpler sugars: fructose and glucose. Bees employ sugar chemistry to create "invert sugar" (fructose + glucose) from sucrose!

Alan's honey granulated very quickly, a trait well known for alfalfa honey (but there isn't any alfalfa grown in our area). Tupelo honey, on the other hand, remains a liquid for two years or more (tupelo trees are common in the southeast but pretty scarce here).

Gene presented several graphs to illustrate the solubility of the three honey sugars in water compared to their concentration in honey. The concentration of fructose and sucrose in honey is well below their solubility limits in water. On the other hand, glucose (= dextrose) in honey is at a concentration higher than its solubility limit in water; it is "supersaturated" in honey.

Honey's crystallization rate has been examined in comparison to the ratio of glucose to water content. When this ratio is less than 1.70, honey "sugars" slowly if at all (the ratio for tupelo honey is about 1.40). Honey will crystallize faster if the glucose/water is greater than 2.10. In our area, cotton (2.04) and mesquite (2.15) are known to yield honey that granulates quickly.

If the water content in honey exceeds 18.6%, natural yeasts are able to cause it to ferment. This can be the result of granulation since the water content of the remaining liquid increases as sugar crystals leave solution. Other causes of "spoilage" in honey include overheating or improper storage causing it to darken and lose flavor.

Besides sugar concentrations and ratios, other factors that impact hon-

ey crystallization are temperature shocks, agitation, reuse of comb, tiny seed crystals or air bubbles or dust contamination from the air, etc.

Both the beekeeper and honey bees are concerned with the long term storage of honey as a liquid unspoiled food source. Honey bees have evolved over millions of years alongside flowering plants. Prehistoric bee's attempted to store plant nectar (produced to attract pollinators), but the sucrose limited how much water could be evaporated while remaining a liquid. Their food resource would ferment if not consumed quickly. As bees evolved they began to use the enzyme invertase to reduce the sucrose concentration, thus permitting water concentrations low enough to prevent fermentation.

Gene has earned our special thanks for all his research and carefully crafted program!! Thanks to our door prize donors as well and congratulations to the October winners.

#### Treasurer's Report

Our October treasury balance was \$3,201.98. Since then we spent \$8.99 to replenish our coffee supply and collected \$5.00 in dues (one renewing member). The resulting balance is \$3,197.99 consisting of \$3,142.99 in our Wells Fargo checking account plus \$55.00 in cash to make change.



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