

The Texas Beekeepers Association

Journal



Apiguard for Varroa Mites

THERE MAY BE OTHER THYMOL PRODUCTS ON THE MARKET TODAY, BUT WE ARE PLEASED TO OFFER APIGUARD® FOR VARROA MITE CONTROL. WITH PROVEN EFFICACY, IT IS THE BEST THYMOL VARROA MITE CONTROL PRODUCT OFFERED IN THE U.S. TODAY.



A Vita-Europe Ltd. product.
by Dadant & Sons, Inc.

Foil pack contains 10
individual 50g treatments
ready for application.

M01480 Apiguard®
c/10 Foil Pack, Ship wt. 2 lbs. ea.
1-9 \$34.00
10 -99 \$31.50
100 + \$27.00



Use Rim & Sticks to allow for correct spacing



*Foil tray shown on
brood frames.*



B10004 Rim & sticks
come unassembled.
Ship wt. 3 lbs. ea. . \$2.95

**VARROA: WAKE UP TO THE
NATURAL EFFICACY OF APIGUARD®**

***A slow release thymol gel that is a very effective
treatment for controlling Varroa mites.***

- ◆ A natural and non-toxic treatment
- ◆ Through thousands of treatments efficacy rates ranged from 85% to 95% with an overall average of 93%.
- ◆ It respects both the hive products and the consumer
- ◆ Encourages the hygienic behavior of the honey bee, preventing a number of related problems
- ◆ Resistance is controlled and unlikely to occur with Apiguard
- ◆ Ease of use: 2 x 50 gm treatment trays per hive, with an interval of 14 days, in summer just after the honey flow
- ◆ Best results occur when bees are active and maximum daily temperatures are between 60°F and 105°F.
- ◆ Though registered as a Varroa treatment, Apiguard has been proven to effectively treat Tracheal mites as well.



www.dadant.com

To Use Apiguard

Place the dosing tray or pad centrally on the top of the brood frames, gel side up. Be sure to allow at least ¼" of spacing between the top of the tray and the cover using spacer boards or empty supers as needed. Apply the second dose 14 days after the first. Screened bottom boards should be closed while Apiguard is being applied.

Bulk tub comes
complete with
dosing scoop,
spatula, and
delivery pads.



M01481 Apiguard® Bulk Tub (6.6 lbs.)
Contains 60 50g treatments in bulk gel
form.
Ship wt. 8 lbs. ea.

1-19 \$99.00
20-99 \$97.00
100-299 \$93.00
300 + \$89.50

M01482 Apiguard® delivery pads only. c/250
Ship wt. 3 lb. ea. \$15.00

• 1169 BONHAM STREET, PARIS, TEXAS 75460
TOLL FREE (877) 632-3268 •

President's Report

from Chris Moore



Fore!!!!

Beekeeping is a lot like golf. Golfers will understand. If you have never played, golf looks easy. You hit the ball to the hole. Simple & easy, right? The frustrating part is that little ball seldom goes where you want it to go. Back in my sales days (pre-beekeeping) I would always look forward to getting out of the office to go play. However, it did not take long for me to get frustrated.

OK beekeepers, sound familiar? We enjoy beekeeping. We learn what to do, how to do it, when to do it, and how often to do it. Simple and easy, right? Just like golf, the direction the ball (or in our case, the bees) go in is not always what we intended.

Queen failure, laying worker, varroa mites, small hive beetles, starvation, wax moths, floods, drought, mosquito spraying, etc. Any of this could happen at any time. We must “keep” our bees by regularly inspecting their health, mite loads and food stores.

Bees are not much different from us. Give us a nice place to live in a good environment and a decent diet and we are happy. That sounds simple, but failure to properly inspect for varroa mites leads to virus problems. Which leads to weaker colony strength, then either wax moths or small hive beetles take over. The final result is the death of your colony. Varroa, however, may not be the issue. Maybe you did not realize during the hot summer months that flowers were not blooming, resulting in your bees becoming weak from poor nutrition. Again, this can lead to weak colony strength and either wax moths, small hive beetles, mice or even ants can potentially take over.

Bottom line...it is easy for our bees to die if we do not properly take care of them and in a timely manner. Unfortunately, most beekeepers do not know how to properly inspect for varroa mites.

TBA just had a Summer Clinic back in June. It was “huge”,

almost 700 people were in attendance. Multiple classes were offered how to deal with any and all of the above issues, including a live demo on how to inspect for varroa mites. Special thanks to Lisa Dittfurth, Lance Wilson, Chari Elam and the other committee members for putting together a fantastic program. And of course the nuts & bolts behind the scene: Montgomery County Beekeepers for hosting the event, Shirley Doggett for registering everyone and our awesome AV Tech, Tim Elliot.

Comments afterwards were wonderful and we are looking forward to an even bigger clinic in Arlington on June 10th next year. We have already booked an awesome speaker for beekeepers of all levels.

TBA also has a committee looking into introducing updated & simplified “Bee Laws” (Texas Ag Code 131). This has not been updated for some 35 years and is long overdue. More information is to come soon. (Mark is covering a few highlights in his article.)

The TBA annual convention is coming up on November 3rd-5th in Belton, TX. This is a great location in Central Texas which allows us to have a great convention at a reasonable price. There is even a camping facility adjacent to the expo.

I would be amiss if I did not mention Real Texas Honey. TBA is continuing to work on and hopes to have exciting news soon about our Real Texas Honey campaign to promote Real Texas Honey from Real Texas Beekeepers.

I hope your honey crop was good this year. Here in SE Texas we received too much rain during our main honey flow. So, for the second year in a row, our yields were once again lower than average. UGH.

But, as I mentioned above, “stuff” happens. We just deal with it and move on. There is always next year, right?

In This Issue

President's Report.....	3
Vice President's Report.....	4
Annual Conference.....	6 - 12
The Brantley Column.....	18
How to Not Squash Bees.....	20 - 21
Hives and Hurricanes.....	22 - 24
Annual Tour De Hives.....	26
Do You Smell Garlic.....	27
USDA Field Day, Baton Rouge.....	28
Seven Methods of Varroa Mite Transmission.....	29
The Buds and the Bees.....	30 - 31
Honey Bee Lab Update.....	32

Keeping the Colony Cool.....	33
TAIS Update.....	34
Texas Honey Queen Article.....	36
Texas Honey Princess Article.....	38
Honey Bee Circadian Rhythms.....	39
2016 Save the Bee Art Contest.....	40
Knowledge, Wisdom and the Varroa Mite.....	42
TBA Club Buzz.....	44
Entomology Student Discovers Neww Bee Species.....	47
It's getting Crowded in Here.....	48
TBA Summer Clinic.....	50
Association Listings.....	54

Vice President's Report *from Mark Hedley*



Mom I'm Starving

When I was growing up as a kid, I can recall my brother and I saying that at least 4 or 5 times a day. My mother grew up with sisters and my own sisters were like hers. Ate like birds. A little here, a little there, but never even came close to the seemingly ravenous appetites that my brother and I had as young growing boys.

It's that time of year that your bees are starting to feel the same way. Certainly, you may have heard them right? My bees tell me they are starving in July and August here in Central Texas every year. The spring was mind-blowing and our spring harvest will rival that of 2014. We are through July and into August now, and the land is parched. The rains come less and less. Flowers are gone, and even the mesquite is finished for the season. What does that mean for your bees? Potential protein deficiencies!

Our hives are packed with honey but the stores of pollen are dwindling quickly. As in your own diet, protein plays an important role in honey bee nutrition as well. Proteins derived from pollen are used to produce royal jelly. Since the only thing the queen is fed is royal jelly; and larva is fed royal jelly during early development, you can begin to surmise that without protein the nurse bees and the queen retinue may fail at their respective roles in the hive.

Have you seen your hives decline in times of dearth? The queen is aware that pollen volumes are diminishing and she responds by reducing the rate at which she produces eggs. Bees continue to die as their life cycle concludes however and during this pollen deficient period, there will be limited bees to replace them. The hive can decline to a level where wax moths and hive beetles can quickly take over.

Honey bees can respond to protein deficiencies by cannibalizing eggs in the hive – a “recycling” of protein per se. Honey bees will also utilize their own Vitellogenin (Google it) in order to produce royal jelly in their selfless attempts to feed

the queen and any brood she produces. As a result, their own health is compromised. Think about a human body that dissolves its own muscle tissue to sustain life. There is a solution to this problem. Your style of beekeeping will help you determine if it is viable for your situation.

Enter protein supplements, pollen substitute, or pollen patties. Each of these is different, some with real pollen, some with adjunct ingredients, and all having the same purpose – to replace natural protein derived from pollen. Some beekeepers add corn, canola, or other oils for additional fats and some are made with heavier sugar syrup or feeding stimulants to entice consumption. Some people have speculated that bees carry man-made protein out of the hive as garbage.

My experience with two commercial products (UltraBee and MegaBee) and one “home-brew” recipe from Randy Oliver all resulted in an increase in brood production during times of dearth. We even noticed that brood production became more of a “steady state to building” level versus the “queen goes wild” level we see during natural pollen periods. If we mistakenly fed our bees while an abundance of pollen was present, our bees would not touch the supplements. Can't blame them, I would eat a steak before a protein bar any day.

Our experience has proven that hives remain strong by feeding the subs during times of dearth. We want our bees to have a nutritionally balanced diet so they are able to hit those fall flows here in Central Texas as well as go into winter as a much larger and stronger hive. You wouldn't want to live on protein bars and shakes, nor am I suggesting that here, only that if you run out of chicken, beef, fish, or legumes you may grab one to sustain life. Your bees may need a little supplemental protein too now that all the natural forage is (or has) dried up. See if it is right for your style of beekeeping.

TEXAS
BEEKEEPERS
RealTexasHoney.com

Cover Picture: SS Brantley with Home Made Smoker, from your Editor

We have everything
**YOU NEED
FOR
KEEPING
BEES!**

ORDER NOW FOR 2016
rweaver.com

All American
& Buckfast Queen Bees.
Package Bees,
4-Frame Nucs with Feeder
Shipping & Customer Pick up available
Bee Supplies are in stock and ready
to pick up

STORE HOURS:

Mon - Thurs 8am until noon and 2 to 4pm
Fri - 8am until noon

**BEE SUPPLIES
AND START UP
BEGINNER'S
KITS**

**ONE STORY
ESTABLISHED
COLONY**



COME BY OUR STORE **FOR YOUR BEE SUPPLIES**

SINCE 1888

THE R WEAVER APIARIES

16495 C.R. 319 NAVASOTA, TX 77868

P 936 825 2333 **E** rweaver@rweaver.com

www.rweaver.com

Entry Form for Honey and Photo Contest By Mail or at Convention

Competition Entry Form

One Form Required Per Contest Entry, Bring Entries and Fees to Registration Table at Convention

Last Name: _____ First Name: _____

Address: _____

City / State: _____ Zip: _____ Phone: _____

Entry Category (Check All That Apply: \$5.00 Fee Per Honey Entry, \$3.00 Per Photography Entry.
Only One Entry Per Category)

- ☐ Honey - Extracted Honey \$ _____
- ☐ Honey - "Black Jar" (note below) \$ _____
- ☐ Photography - Our Glorious Honey Bee \$ _____
- Total \$ _____

"Black Jar Categories"

Local Blend ____ Local Varietal ____ Non-Local Blend ____ Non-Local Varietal ____ Exotic ____

Mail to: Shirley Doggett, Membership Coordinator, 400 County Road 440, Thrall, TX 76578

Texas Beekeepers Association Annual Convention at Bell County Expo Center 3rd - 5th November 2016

La Quinta Inn and Suites
229 West Loop 121, Belton, TX 76513
(254) 939-2772

Room Rate \$99
Call before Monday October 17th

Conference from 8am Friday 4th through 5pm on Saturday 5th
Annual Banquet Saturday 5th November 6pm - 10pm

Mike Palmer and TMBP Testing - all day Thursday 3rd



**Texas Beekeepers Association
Annual Convention
3rd - 5th November 2016**

**Bell County Expo Center
301 West Loop 121, Belton, TX 76513
www.bellcountyexpo.com**

The Annual Convention this year features:



*General Sessions Friday morning through Saturday afternoon
Texas Master Beekeeper Testing on Thursday
"Building a Sustainable Apiary" with Mike Palmer on Thursday*

Speakers

Mike Palmer - Keynote Address

Liz Walsh, Adrian Fisher, Pierre Lau - Reports on 2015 Scholarship Awards

Lance Wilson - Master Beekeeper - Managing Bees in an Africanized Zone

Chris Moore - President of TBA - Taking Care of your Honey

Megan Mahoney - Bee Informed Partnership - Queen Rearing

Eddie Collins - CNC Farms - How to be a Fulltime Beekeeper on the Side

Mark Dykes - Chief Texas Apiary Inspector - New Varroa Resources

Mike Palmer keeps bees at French Hill
Apiaries in St. Albans City, Vermont.



Please list attendees if you register for Family Membership

Name _____

Email _____

Spouse Name _____

Address _____

City _____ State _____ Zip _____

Phone: _____

**MAIL REGISTRATION FORM
AND CHECK PAYABLE TO
TEXAS BEEKEEPERS ASSOCIATION to:**

**SHIRLEY DOGGETT
MEMBERSHIP COORDINATOR
400 COUNTY ROAD 440
THRALL, TX 76578**

* Family Membership means members who have a family membership and up to 6 children living at the same address

2016 Texas Beekeepers Association Convention Registration

**Please register for the annual convention on-line at
www.texasbeekeepers.org/annual-convention-2016**

Make Sure you are Logged in to get Membership Rates

Registration Form for Mail Registration

	Register by Oct. 22nd	Register at Conference	Number	Total
TBA Member - Full Conference Friday 4th November and Saturday 5th November	\$80	\$100		
TBA Family Membership - Full Conference Friday 4th November and Saturday 5th November	\$130	\$150		
TBA Member - Single day (Friday or Saturday)	\$50	\$70		
Non-Member - Full Conference	\$100	\$120		
Non-Member Family - Full Conference	\$140	\$160		
Non-Member - Single Day (Friday or Saturday)	\$75	\$90		
Mike Palmer - Thursday Workshop - Single TBA Member	\$90	\$110		
Mike Palmer - Thursday Workshop - Couple TBA Member	\$150	\$170		
Mike Palmer - Thursday Workshop - Single Non-Member	\$110	\$140		
Mike Palmer - Thursday Workshop - Couple Non-Member	\$170	\$190		
Lunch Ticket for Saturday 5th November	\$10	\$12		
Queen's Luncheon - Friday 4th November	\$20	\$25		
Annual Banquet - Saturday 5th November TBA Member	\$40	\$60		
Annual Banquet - Saturday 5th November Non-Member	\$50	\$75		
TOTAL				

2016 Annual TBA Convention Honey and Photography Rules

from Znobia Wootan

The Texas Beekeepers Association will conduct the honey and photo contest during the Annual Convention in Belton on October 29 - 31. Judging will take place beginning Saturday morning with results presented on Saturday evening at the Awards Banquet.

General Entry Requirements:

1. You may register and pay by credit card or PayPal on-line at texasbeekeepers.org while registering for the convention. Bring your Honey and Photo contest entry ticket(s) with your entry/entries to the registration table. Alternatively, remove (or print) the newsletter entry form below if you do not have Internet access. We accept photocopies.
2. When registering on-line, purchase one ticket per entry in the honey or photo contest. Alternatively, use one manual form for each contest entry. Only one entry per category allowed per contestant.
3. Remove identifying label or markers from entry, with the exception of the two additional containers required for a "Black Jar" entry (See Black Jar Entry Requirements)
4. Contest administrators will affix coded tabs to entries upon submission.
5. Entry deadline: At the convention contest headquarters, 1:00 pm Friday, October 30, 2015. Contest Entry Fees: Honey \$5.00 per entry, Photo \$3.00 per entry.
6. Disposition of Entries: Winning entries will be retained by the Texas Beekeepers Association and sold during our fund-raising event. Owners of non-winning entries may donate their entries to the fundraiser, or retain them at the end of the competition.

Polished Honey Entry Requirements:

1. Submit extracted honey entries in one-pound Queenline glass jars.
2. Contestants may only submit honey entries produced in their own apiary or by bees that they manage in a different state for honey production or pollination (see also Black Jar – Non Local Category).
3. If donating entries to the Fund Raising Auction, submit any labels and floral source information desired in a separate envelope for attachment at contest conclusion.

"Black Jar" Honey Entry Requirements:

1. Entries must be submitted by a beekeeper and be pure unadulterated honey produced by his or her own bees.
2. An "Entry" consists of three (3) containers of any style (8 ounces or more) of the same honey.
3. Submit one of the three entry samples in a container without any identifying marks; while the other two must have the beekeeper's label attached as he or she would when offering their honey for sale. None of the three entries will be returned. The labeled containers will be sold as a fund-raiser for the Texas Beekeepers Association while promoting the individual beekeeper or apiary.

Photo Entry Requirements:

1. TBA may retain digital copies of entries for permanent TBA archives. Photographer submitting an entry retains all legal copyrights. Contest administrators will return all entries at the convention upon completion of archiving process. The first place photo entry will be featured on a 2016 TBA Journal cover.
2. Judges will evaluate all entries in a class, regardless of black and white, color, or slide format. Photographers may submit any size entry with a maximum size of 8"x10".
3. Entries in "Our Glorious Honey Bee" should depict honey bees in their natural environment depicting some element of honey bee behavior, science, or history or any aspect of beekeeping that contains a honey bee in the photo.
4. Photographers may only submit photos taken personally.

Contest Judging – General

1. Contest judges will evaluate and score entries on Saturday, October 31st, 2015.
2. Contest Committee Chairman will announce awards Saturday, October 31st, at the Awards Banquet.

2016 Annual Convention Honey and Photography Contest Rules (contd.) *from Mark Hedley*

HONEY JUDGING CRITERIA

Contest Judging – Polished Honey – Judges may award points to entries in the following categories for a possible 100 points:

Polished Honey	
Container Appearance	10
Level of Fill	10
Free of Foreign Matter	10
Brightness	10
Free of Air Bubbles and Foam	20
Flavor	40
Total Points	100

Contest Judging – “Black Jar” – Judges will award First, Second, and Third place to entries in categories based on blind tastings. Judges will not see the color, clarity, or any visual appeal of the honey. It is a contest based on flavor profile and taste alone. A panel of judges will taste test and score the honey entries individually, awarding points to each entry. Total Points determine placement.

Best Local Blend	(example blend: wildflower, mesquite, native brush, tallow, etc)
Best Local Varietal	(example at least 45% from one source: tallow, cotton, native brush, wildflower, etc)
Best Non-Local Blend	(example: Clover, Canola, Orange, Sourwood, etc blends)
Best Non-Local Varietal	(example: at least 45% from one source: Clover, Canola, Orange, Sourwood, etc.)
Exotic	(It still has to come from your own bees, and really be honey)

PHOTOGRAPHY JUDGING CRITERIA

Contest Judging – Photography – Our Glorious Honey Bee - Judges may award points to entries in the following categories for a possible 100 points:

Photography – Our Glorious Honey Bee	
Relevancy to Topic	25
Composition / Arrangement	15
Focus / Sharpness	20
Lighting	15
Creativity	25
Total Points	100

AWARDS & PRESENTATIONS

TBA will present awards ribbons and a check to First (\$50), Second (\$25), and Third Place (\$15) winners in each black jar honey category based on total points earned. TBA will present award ribbons to First, Second, and Third place winners in each Polished and Photography category. Contest administrators may segregate Polished honey by color categories based on volume of contest entries.

All First, Second and Third place entries will be displayed on the top tier of our special display platform after judging and awards presentation and will remain in view for convention attendees.

Convention Grand Champion: A special award will be presented to the contestant with the highest total points across all entries.

Convention Reserve Champion: A special award will be presented to the contestant with the second highest total points across all entries.



Fall Testing for the Texas Master Beekeeper Program

When: Thursday, November 3rd 2016

Where: Bell County Expo Center, Belton,

TX Registration: Online registration begins
on September 1st

Website: <http://masterbeekeeper.tamu.edu/>

Questions: Email us at TAIS@TAMU.edu

13th STREET



STUDIO

Art Classes for Children & Adults

About the Studio

Welcome Artists, and all those aspiring to become artists! Announcing the grand opening of 13th Street Studio in Georgetown, where Allison French teaches art classes for children and adults.

At 13th Street Studio, students first learn to truly SEE through drawing, developing their sense of observation as they record their perceptions through a variety of mediums. Having gained confidence and proficiency through this "eye training", students embark on an exploration of art styles and experiences designed to enhance creativity.

As students progress, projects will continue to reinforce this foundation of observing and drawing while introducing new subject matter, mediums, techniques, special-focus opportunities and field trips. Students will also study the importance and real-life applications of art throughout history and in our world today, rounding out their art experience and inspiring artists with purpose. The private studio and small class sizes provide a supportive environment where students learn the value of quiet concentration and enjoy freedom from competition and criticism, allowing them to create without distraction. Students are invited to sketch outdoors in the garden when weather permits, and classes may occasionally be scheduled off-site for special projects.

Students are motivated toward continued creativity throughout each week by having their own supplies. The \$10 per-student, per-semester supply fee will cover studio supplies for all students to use, and there will also be a small packet of recommended personal supplies for each student to purchase on their own, which students bring to class each week and also use at home.

About the Instructor

A lifelong artist, Allison's years of teaching experience have shown her that drawing is a completely teachable subject, and that ANYONE can learn to draw and excel in the arts with practice. She believes in the power of art to foster creative thinking and problem-solving, enhance awareness, and cultivate a love for beauty. Allison offers much more than an art class; she favors a hands-on approach to involve all the senses, taking art instruction beyond the "how to" and engaging her students to consider the "why" that motivates the making of art. She aims to make art relevant to every person by helping students make the connection between art and every other discipline, and use their artistic abilities to make a difference in the community.

Small Group Classes & Private One-On-One Instruction

Group Classes \$50/mo
Private Classes \$100/mo

Mondays & Tuesdays

9:00-10:00
10:00-11:00
11:00-12:00
1:00-2:00
2:00-3:00
3:00-4:00
4:00-5:00

Contact

Allison French
512-942-9010
13thstreetstudio@gmail.com



ABF 2016

Your Membership - *Serving You & Your Bees*

**ABF is
Over
5,000
Members
Strong**



What we do for you:

- Bi-Weekly Webinars on the most up-to-date and practical issues
- E-Buzz, a monthly electronic newsletter with how-to articles & updates
- ABF News, a bi-monthly magazine offering updates on ABF and the industry
- Work with EPA to reduce pesticide impacts on bees
- Host the largest national beekeeping conference in the USA
- Promote bees, beekeeping, and honey via the American Honey Queen Program
- Pursue legislation to halt adulterated honey being imported
- Provide discounts to attend our annual conference

What we do for the bees:

- Encourage federal agencies to allow increased use of lands for apiary sites
- Coordinate with other industries to find common ground to save honey bees
- Pursue legislation to limit pesticide exposure to honey bees
- Partner with the Foundation for the Preservation of Honey Bees
- Contribute to the research of honey bees
- Educate beekeepers on how to better care for their bees
- Work with USDA-ARS to increase research into issues affecting bee health

**Our bees are in trouble. We
need your help to save them.**



82%

of ABF Membership Dues go
directly to education,
research & legislative action
for bees & beekeepers





Brazos Valley Beekeepers Association **BEE SCHOOL**

When: Sat, September 24, 2016

8:00am – 4:30pm

Where: Rudder High School

**3251 Austin's Colony Parkway
Bryan, TX 77808**

Registration for the school is \$50 for an individual, \$80 for a couple; children from age 10 to 17 may attend for \$15 each. Late registrations (after Sept 10) will be \$10/person higher. Lunch is included with your registration.

This full-day event has multiple classes covering virtually every aspect of beekeeping: from the very basics of getting started, expanding an existing apiary, landscaping using "bee-friendly" plants, and even how to get an Ag exemption on your property taxes by keeping bees. And much, MUCH more.

<http://www.bvbeeks.org/fall-beekeeping-school.html>

Visit the website above to register, view class schedule and details. Or you can contact the event secretary, Dalene Barnes at:

979-220-2790 or beeschool@bvbeeks.org.



Proceeds benefit Brazos Valley Beekeeping 4H club



*So far in 2012
we have delivered over
\$2,000,000 to beekeepers
around the country!*

BEEKEEPING INSURANCE SERVICES

APICULTURE INSURANCE PROGRAM A Subsidized Program for Beekeepers

Available Nationwide

Offering All Forms of Insurance Including:

- * **USDA Apiculture**
- * **Property**
- * **General Liability**
- * **Automobile**
- * **Life Insurance**
- * **Home & Farm Insurance**

We are Proud Members & Supporters of:

- * **American Beekeeping Federation**
- * **American Honey Producers Association**
- * **California State Beekeepers Association**
- * **Florida State Beekeepers Association**
- * **Texas Beekeepers Association**
- * **North Dakota Beekeepers Association**

Kevin Rader: krader@beekeepingins.com

Noel Epstein: nepstein@beekeepingins.com

**www.beekeepingins.com
888-537-7088**



Book Now: Full Strength Colonies, Nucs,
and BeeWeaver Queens

BeeWeaver.com

Offering a full line of beekeeping equipment
& protective gear. Pick up your Bees, take
a Bee Lesson, and head home a Beekeeper!

Dripping Springs & Navasota, Texas



We're proud to be an official Dadant dealer. Dadant, one of the few family operated
beekeeping companies from the 1800s. Just like us!





The Brantley Column

from S. S. Brantley
East Texas Beekeepers Association

August is hot and dry and hard on the Honey Bee colonies that are trying to make it to the cooling of autumn. There is limited forage for the field bees to collect so most of their time is spent collecting water to help cool the hive. Inside the hive, house bees fan this water with their wings and the evaporating effect helps cool the hive.

There are ways you can help your bees keep the hive temperatures down. Be sure your bees have access to water. If there is no natural source nearby, provide some kind of supplemental water source. With our temperatures reaching 90 by noon and around 100 by evening, you may have to replenish the water supply frequently.

Ventilate the hive to let heat escape at the top, setting up a convection current pulling in cooler air from underneath. Prop up the front end of the Outer Cover, either by placing a wedge or piece of wood or stick on the front edge of the Inner Cover, or, set the front edge of the Outer Cover on the Inner Cover. I have seen some beekeepers make a two or three inch deep spacer between the Inner and Outer cover, with screened vent holes or slots in the side. Some bee suppliers sell a commercial version of this and call it a Ventilated Feeding Super. Some also sell a ventilated Inner Cover which lets the heat rise easier than a solid Inner Cover with the escape slot cut in the center. One word of caution, if you use a method that involves propping up the Outer Cover, be aware that you are creating another opening the bees must guard against robbers. Make sure the hive is strong and has plenty of bees to defend the opening. If your hive is weak, it is better to use a method involving screened slots of holes.

If your hive is located in full sun, you can add a shade board to the top, reducing the impact of the hot sun beaming down to the lid. Place a couple of 2x4s on the top of the Outer Cover, then add a 2 foot by 2 foot piece of plywood over them. You now have a shade cover with an air space underneath. Place a heavy

cinder block or several bricks to the top to keep the plywood from blowing off.

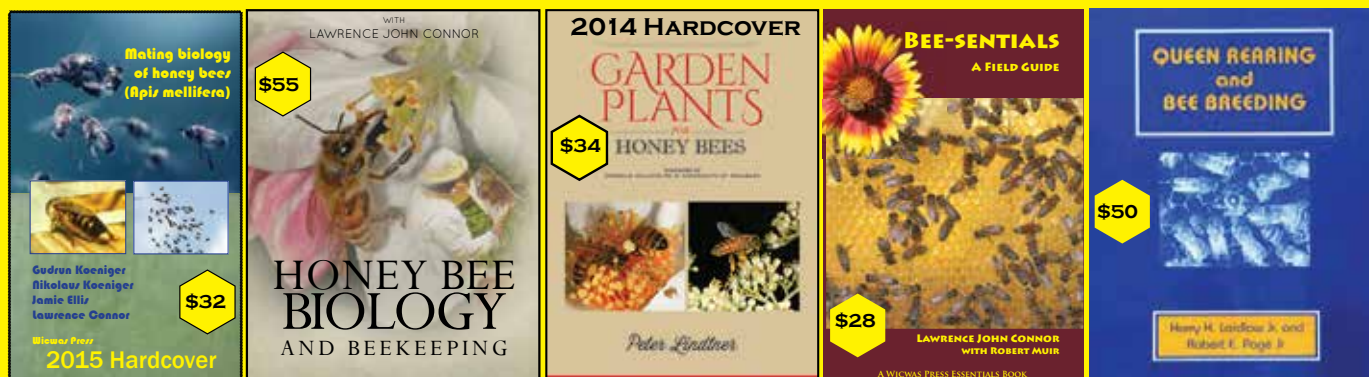
Remember, during the hot weather, you can expect to see "bearding" during the hottest time of day, bees collecting on the outside of the hive. This is a natural action of the bees to help move body heat outside and is generally not indicative of a problem in the hive.

August should be the month to finish extracting honey and to then consider treating for Varroa mites. After the supers have been removed, do a mite count on each hive to determine whether treatment is needed. If treatment is needed, follow manufacturer's instructions carefully. There is a wealth of information about making mite counts and choosing treatment methods on the Internet. If you are computer illiterate like me, check with an experienced beekeeper for advice.

For those of you involved in removing bees from structures, I had the opportunity to see a new gizmo in action that helps locate the hive. I was impressed by what I saw. We usually can see bees coming and going from a hole or crack in the structure but that does not always mean the comb is close to the entrance. For several years, bee removers have used a laser thermometer to help locate the hive and know where to start removing siding to get to the comb. The laser thermometer could detect the heat of the brood nest behind the siding and give a better idea where to start cutting. Now, you can purchase an Infrared camera lens that attaches to your cell phone and shows the heat signature of the brood nest as a bright red spot, allowing you to pinpoint the exact location of the nest. Prices begin around \$200 and move upwards depending on how sophisticated an IR lens you need. Look it up on the Internet. Amazon has several, complete with reviews about how well they work. Make sure the model you buy is compatible with your type of cell phone.



*S. S. Brantley with
 Elsa Sorensen from
 Williamson County Area
 Beekeepers*



WICWAS QUALITY BEE BOOKS

Prices include postage within the USA. Request quote for international orders.



ON LINE PAYPAL STORE:
WWW.WICWAS.COM



MAIL ORDERS:
WICWAS PRESS, 1620 MILLER RD,
KALAMAZOO, MI 49001

How to Not Squash Bees - Notes on Top Bar Hive Inspection

from Micheal Mathews, Fayette County Beekeepers



In a recent social media post, a new beekeeper asked how to keep from squashing bees between the bars during hive inspection. A myriad of advice followed, some sound and others simply interesting. Perusing the internet, I found a number of methods and tools to address the task. In the end, many of these approaches seemed more trouble than they are worth and a few simple tricks are all that any top bar beekeeper would need to keep hive inspections from turning into a dangerous situation for the bees.

The top bar has a wide surface that is placed flush against the other bars. During an inspection the beekeeper will remove each bar, inspect the comb and then return it, creating a potential to crush worker bees when the hive is disassembled, then again as it is reassembled. Good hive inspection practice will make it easy to clear bees from between the bars as the hive is disassembled and reassembled, but more importantly, it will reduce the number of bees at risk and keep the bees calm in the first place. To demonstrate these methods we will walk through a hive inspection.

First, a quick review of tools required. The minimum tools needed to manage a top bar hive include a long narrow kitchen knife, a bee brush and a smoker. That's all. The kitchen knife needs to be stiff enough to lever bars free and long enough to reach to the bottom of the hive to cut any comb connected to the sides. While there are a number of specialty tools that can make top bar management easier, these are the three that I reach for most frequently.

Begin the hive inspection at the end of the hive farthest away from the main entrance. Depending on the colony some smoke may be in order to calm them, but we try not to use smoker unless it is necessary. Most of our hives have some empty bars at this end and we begin by removing two of those bars and looking inside to determine how much new comb the bees have built since the last inspection. Lightly tapping the empty bars before they are removed will shake any bees back into the hive. Next, remove two additional bars, for a total of four, and no more. The photo below shows a proper inspection space in a new hive that has a follower board in place.

Making an overly large inspection space is inviting trouble. When we first started top bar bee keeping, we would routinely remove six or eight empty bars so that when we had finished inspecting a bar we could easily set it back somewhere in the hive without placing it against another bar. Bees immediately rushed in to fill the small gaps left between the inspected bars.

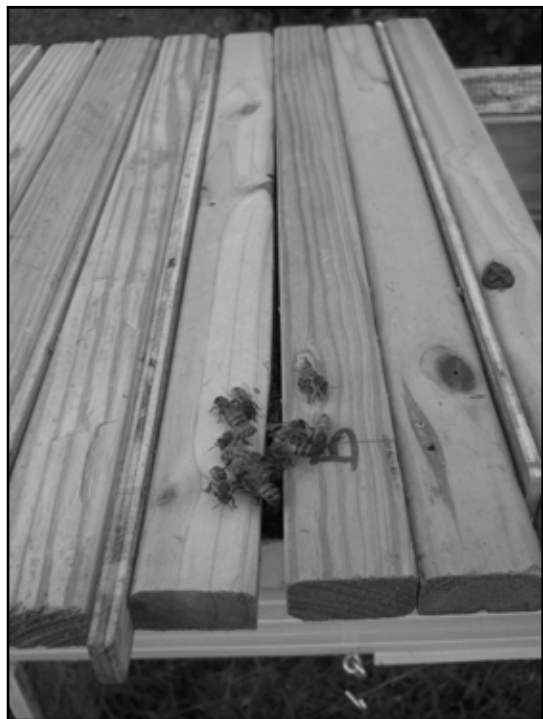


Inspection Space

This led to a lot of smoke and time as we worked to clear the bees from between the bars while we reassembled the hive as well as agitated bees. Bees see the small openings between bars as something to be investigated, if not defended, and the larger inspection opening as something to be avoided. Keeping this in mind, we began to keep a single four bar inspection space and move each bar across the space after inspection. Bees in the enclosed sections at either end stay calm compared to those on bars with narrow spaces between them. Working efficiently and quickly a beekeeper can snug an inspected bar back into the hive before bees fill the gap. This way the inspection opening moves from one end of the hive to the other, one bar at a time, with enough space to work and relatively undisturbed bees.

Okay, so that works most of the time. With each inspection, there will be a few bees that do not cooperate with this method, climbing between the bars before the beekeeper has a chance to place them. The simplest thing to do is to set the inspected bar as close as possible without crushing the bees and then slowly use the back of the knife to narrow the gap and force the bees back into the hive while pushing the bar closed from one end. Note in the photo below I am pulling the knife toward me as I close the gap.

Using the brush in the same way is not quite as effective. Somehow, I always managed to capture the bristles between the bars as I close them. Smoking to force the bees into the hive works, but it takes longer and we prefer to limit smoking the bees for their sake and for ours. For top bars with shims, the



Bee Space



Multiple Close



Clearing with Knife



Shim

beekeeper can remove a shim, reduce the gap and then replace the shim after quickly scraping away the propolis. This method is especially useful when reassembling the hive after inspection. During reassembly, we generally slide four bars at a time across the inspection space. We will remove a shim from the end of the section being closed, slide the bars almost into place and replace the shim into the gap to push any bees back into the hive.

I will be honest and admit that I end up squashing a bee or two at each hive inspection. I doubt that there is any practical way to avoid it. Sound practices will decrease the number of bees affected and keep the colony calm while speeding the beekeeper's work. Considering the Texas summer and how few hours of the day are suitable for working in the bee yard, having a quick and reliable way to disassemble and assemble a top bar hive allows the beekeeper more time to focus on inspection.

Hives and Hurricanes: Ways to Prepare your Apiary for the Storms of Summer

from Matthew Fuller, Ph.D., Owner, Fuller Farm



Hurricane Season is here and the Pacific ocean sure has been busy this year. Fortunately, as of yet, no Atlantic Hurricanes have threatened the Texas Gulf Coast. However, sooner or later, Texans will face their share of Gulf storms. And when we do, preparations must be made to ensure that hives and bees are not lost in the floods, rain, winds, and general chaos a hurricane brings. In this article we'll review just a few steps you can take to prepare your hives in the event of a hurricane. The advice offered here is meant to help hobby beekeepers, those with no more than, say, a dozen or so hives. However, many of the principles could be useful to larger-scale apiaries. First, we'll get familiar with a Hurricane and all the troubles it can bring. Then, we'll cover steps you can take before a storm to prepare for the hurricane. You will learn about the kinds of information needed to make informed decisions and how to prepare your hives for all that a hurricane can bring. Finally, we'll discuss some things you can do after a storm, whether or not your hives came through alright.

Anatomy of a Storm

Anyone who has lived in Texas long enough will have the distinct challenge of preparing for a Hurricane sooner or later, especially those living in any close proximity to the Gulf Coast. However, Hurricanes can also bring heavy winds and rains to those living well inland and in North, Central, and West Texas. Readers in the Texas panhandle might recall 1988's Hurricane Gilbert that dumped sizeable amounts of rain on the Rio Grande Valley, then West Texas, and the Panhandle. Gilbert even dumped a total of 3 inches of rain as far away as Central Michigan. However, the Lone Star State has welcomed many new residents to its border lately, so for those less familiar with hurricanes, let's review, briefly, just what they are.

From the aerial photos weathermen show us, we might be tempted to think of hurricane as large, wet tornadoes. The fact is the smallest hurricane is much larger than even the largest tornado and lasts much longer. Hurricanes that threaten the Texas gulf coast get their start out in the Atlantic Ocean, the Caribbean Ocean, or the Gulf of Mexico. These waters provide the first ingredient to hurricane formation: Warm water. Hurricanes need warm water to form. They also need wind, racing off of the African continent to form water molecules in the air out over the ocean. As this wind blows across the ocean, water in the air condenses, forming large cumulonimbus clouds. This first stage of a hurricane is much like a large thunderstorm and is sometimes called in *Invest* as "Hurricane Hunter" planes and crews are sent out to investigate the storm. As the storm continues to collect

moisture from the ocean, warm, moist air rises and cools. This warm, moist air raising elongates clouds into columnar structures and the cooled air rotates back downward, creating a vertical rotation or definable convection. At this point, the storm is termed a tropical disturbance. As the storm develops it picks up wind and once its winds are sustained between 25 and 38 mph, the storm is upgraded to a tropical depression. Beyond 39 mph and with the formation of a clear eye, the storm is given a name and becomes a tropical storm. Storms with winds between 40 and 73 mph are tropical storms with names. Storms with winds beyond 74 mph are officially known as tropical cyclones or named hurricanes.

Storms of this magnitude are classified through a numbering system. Class 1 represents the least destructive. However, even these storms can be 50,000 feet high and 125 miles across. Hurricane Claudette, which made landfall at Port O'Connor, TX in July of 2003 was a Cat. 1 storm and caused \$180 million in damages. In contrast, Hurricane Ike, which hit Galveston in September 2008, made landfall as a category 2 storm, but was, prior to hitting Jamaica, a category 4 storm. Ike did \$29.5 billion in damages and killed 103 people. Hurricane Rita, still fresh on some folks' minds, made landfall in Western Louisiana with maximum winds of 180 mph and making landfall with winds of 120 mph and doing \$12 billion in damage.

Category	Wind Speed (mph)	Damage at Landfall
1	74-95	Minimal
2	96-110	Moderate
3	111-130	Extensive
4	131-155	Extreme
5	Over 155	Catastrophic

Meteorologists and first responders generally advise citizens about five dangers from hurricanes: a) winds, b) storm surge, c) rains, d) tornadoes, and e) evacuation complications. Obvious dangers from winds include structural damage to homes, but also damage from falling or blown debris. Storm surges primarily occur when the strong winds push coastal waters inland and flood low lying areas. A small portion of the storm surge (usually less than 5% of the total surge) is due to the low pressure at the

center of the storm pushing waters inland. Storm surges can have tremendous damaging effects. Hurricane Ike's surge was measured at 15 to 20 feet above normal tide levels while Katrina's surge was measured 28 feet above normal levels. Areas at or below sea level near the coast are most susceptible to surges. Coupled with rains inland, water accumulated in inland creeks, lakes, and streams can back up with the sudden deluge of water. Tornadoes have also been frequently sited as hurricanes make landfall and can cause severe localized damage. Finally, large masses of people evacuating the path of the oncoming storm can cause delays, and localized food, gasoline, and hotel shortages as they temporarily relocate to new areas. Nerves and tempers can flare as people worry about their homes, loved ones, and facing the tremendous power of a hurricane.

Six Steps to Consider in Preparing for a Hurricane Before the Storm

God willing, you are reading this article with the leisure of simply staying informed. But, if you are reading this with the knowledge of an impending hurricane, there is much work to be done in your apiary. The following is a basic list of simple preparations you can take to help your bees weather the storm. This is, by no means, a complete list and no one other than you is best situated to respond to the unique needs of your property and your bees. Still, I offer these ideas as a way to help us all prepare. Some of these same principles could prove useful in preparing for thunderstorms, tornadoes, or wind storms and for general preparations.

1. **Connect with reliable sources of information.** In preparing for an oncoming Hurricane, knowing information about the path of the storm can mean the difference between days of necessary preparations and lost time. Information can be easily found from local news media. Prepare to access information after the storm bearing in mind that TVs, cell phones, and other sources of information you had before the storm may be useless after the storm. I keep a battery-operated weather radio hand for just that reason. Information, before and after a storm, is critical to preparations and repairs.
2. **Prepare and gather your beekeeping equipment.** If, like me, you come in from a hot day working your hive, peel off your bee suit and pitch your hive tool in a dark corner of your barn or honey house, a hurricane will give you a chance to collect all of your equipment in one area. Collect your equipment and find those items you have misplaced. As a storm moves through, having ready access to equipment will be important. Looking for your smoker after a storm could take up valuable time you can devote to other necessities in the hives and on your land. Do an inspection of the exteriors of your hives, patching up gaps and cracks. However, be careful not to open the hives unless a full hive expectation is needed. The propolis bees use to glue hives together hives can provide additional stability to the hives. There are accounts of Langstroth hives standing throughout a hurricane only to have the top cover blow off and all the combs destroyed and bees lost. But the propolis held the hive bodies together.
3. **Consider lowering hives off of hive stands.** Certainly, some beekeepers will wonder how to bring hives off of hive stands without destroying propolis. Perhaps you can move the

bottom board and 1 brood box down to the ground and move other boxes together. Either way, it may be beneficial to move hives off taller hive stands. Winds are somewhat diminished right next to the ground. Keeping hives up on hive stands may allow winds to get under the hives and could knock the hives over or cause internal damage to the hive structure. The design of Langstroth hives makes them fairly aerodynamic and able to withstand a surprising amount of wind. You might consider taking top bar hives off of their legs if possible. See the "word of caution" under item 5.

4. **Weight or strap down hives.** I often use a ratchet strap to secure hives against skunks and raccoons. But ratchet straps can be an important addition to a hive in a hurricane. If you move your hives to the ground, running a strap across the top of the hive and through cinder blocks on the ground on either side of the hive could provide additional security in a storm. Others I have known have driven rebar hooks into the ground and used straps or ropes to hold down the hive or multiple hives at once. Others have put bricks, blocks, or stones on top of their hives to weigh down the hives and at least keep the top covers on.

5. **Consider moving your hives if needed.** If you have a manageable number of hives you might find it effective to move them to a protected, leeward side of a barn, house, or mound of dirt to provide a wind break. I have even known beekeepers who closed up their hives for the duration of the storm and moved them into their garage (along with necessary hive inspection equipment). At minimum, review trees and limbs in your apiary or site and determine if hives need to be moved from potential "hive crushers" or if dead trees or limbs should come down, a safety tip that is good for beekeepers before, during, and after a storm.

A word of caution, however. The potential for water and floods that could cover the hive entrance or wash away the hives altogether should be taken into account. If your hives reside along a river, creek, or low-lying area extra caution should be used in siting your hives in a new temporary area. Also, standard "re-orientation" measures may be necessary depending on when, how long, and how far you are moving your hives.

6. **Consider using small entrance reducer holes, covering screened bottom boards, and making sure bees have enough room in the hive.** Wind seems to agitate bees. Using an entrance reducer with the smallest holes and closing up screened bottom board (if equipped) can reduce the wind entering the hive. Just make sure that you are only closing the hive up this much if a storm is imminent. Closing the hives up this much during the hot summer days could have disastrous effects if rain and clouds do not come to cool off temperature. Also, ensure that bees have enough room for all of them to fit within the hive. If needed, add another hive box so all of the bees can fit inside the hive when it is at its fullest capacity.

What to Expect During the Storm

With proper preparations, your hives should weather even strong hurricanes well. These preparations and others you might come up with can increase your likelihood of still having bees around following the storm. During the storm, focus on your

house, family, and immediate needs. The bees will be fine and, no matter how much we might care about bees, family and friends need our attention as well. If the hurricane is passing over your site, resist the urge to go outside and check on them bees. Dangerous winds, lightning, flooding or downed electrical lines make outdoor investigation during the storm unsafe.

During (or just before) some storms I have noticed large numbers of bees bearding or congregating on the front entrance of a hive. Moreover, these bees almost seem to be completely calm and relaxed. I wish they were that way on honey harvesting day! Southwick and Moritz (1987) found that honey bees have exceptionally well-tuned temperaments that are influenced by the weather. In fact, only bee breeds were found to be more influential on bee's temperaments. In my mind, and in keeping with the notion of the hive as a super organism, your bees' temperament and activities during a storm will really be a function of the microenvironment immediately surrounding the hive. Your bees could be active during a hurricane or they could be agitated. There are several accounts from beekeepers who found that a passing hurricane did little to affect bee foraging in any way.

After the Storm: Cleaning Up and Getting Back to Normal

Hopefully, your hives, home, and/or land did not sustain major damage during the storm. If it did, the period following the storm offers an opportunity to take stock of what was and was not damaged in the storm. The following tips can be useful for beekeepers in cleaning up after a storm.

1. **Seek additional information.** Has the storm completely passed? Are additional waves expected? How long will you be without power? Seeking reliable information on the storm and any damage it may have caused is a useful endeavor in this stage.
2. **Put everything back how it should be.** If you moved hives off of hive stands or to a new location, quickly move them back to their original location and "reorient" bees as needed. Doing so quickly after a storm return bees to their routine and lets them begin foraging again quickly after the storm.
3. **Open up the hives once more.** If you used the small entrance on the entrance reducer and/or closed the screen bottom board, be sure to reopen the hive once the storm passes and before hot temperatures return. This will help the stressed out bees regulate the temperature of the hive and return to foraging, if they ever stopped

4. **Look for local news on mosquito spraying.** The Federal Emergency Management Agency, the Texas Department of Public Safety, local authorities, or even home owners associations will sometimes initiate mosquito spraying programs in response to the large amounts of water hurricane bring. When these programs are implemented, authorities are very aware of the needs of beekeepers and often contact local beekeeping clubs to notify beekeepers of spraying areas or flyover paths. For readers outside of Texas, some states, such as Florida and North Carolina, ask beekeepers to register their hive locations to ensure these areas are not sprayed. Beekeepers should be in regular contact with authorities to ensure hives are not dusted with pesticides that could kill an entire apiary.

5. **Check for governmental assistance programs.** In 2015, the USDA made available assistance to beekeepers who lost hives in floods related to Tropical Storm Erika. Several programs have been implemented since. If you face the misfortune of losing one or more hives, assistance programs can help beekeepers afford the purchase of new hives or nucs to restart their apiaries. Local beekeeping clubs are often excellent sources of information for such programs as are the USDA website (<http://www.usda.gov>).

6. **Check in on other beekeepers.** The beekeeping community can be an amazing resource and support network in difficult times. In addition to helping out with hives, beekeepers have been known to come together to help with home repairs, land and debris clearing, and emotional support in tough times. Once your home, hives, and land are back in order, check in with other beekeepers to see how you can lend a hand.

Hopefully, you will never have to use the tips in this article, but if you do, an ounce of prevention can be worth a pound of cure. Rely on your local beekeeping network, neighbors, and emergency responders to weather the storm. Bees have been surviving hurricanes for millions of years. With just a little help from you, your hives should be able to withstand all that hurricanes thrown your way.

References

Southwick, E. E., and Moritz, R. F. A., (1987). Effects of meteorological factors on defensive behaviour of honey bees. *International Journal of Biometeorology*, 31(3), 259-265.

**There are 1/2 the number of beekeepers there were 25 years ago.*

**There are 1/3 less beehives as there were 25 years ago.*

NOW OPEN IN MARSHALL

Come check out our fully stocked Texas location with bulk syrup pick-up available!

Pro-Sweet

- Won't crystallize or ferment
- Helps bees put on weight
- Stimulates bees
- Pick-up and delivery available

LIQUID SUCROSE

- Stimulates egg laying
- Builds bees quickly
- Easy for bees to break down
- Delivery available

55 HFCS

- Ready for feeding
- Resistant to fermentation
- Helps bees put on weight
- Delivery available



Travel Times to Mann Lake

Shreveport - $\frac{3}{4}$ hr

Texarkana - $1\frac{1}{4}$ hr

Dallas - $2\frac{1}{4}$ hr

MONDAY-FRIDAY
8 AM - 5 PM

SATURDAY
8 AM - 4 PM

800-880-7694
www.mannlakeltd.com

MANN LAKE
WE KNOW BEES
An Employee Owned Company

1600 COMMERCE STREET
MARSHALL, TX 75672



The 4th Annual Central Texas Tour de Hives

The 4th Annual Central Texas Tour de Hives is coming up soon and we have lots of cool stuff planned for everyone to enjoy!

Event Location:
Zilker Botanical Gardens
2220 Barton Springs Rd.
Austin, Texas

Learn more about beekeeping and related topics such as planting native bee friendly plants, how to make a solar wax melter, mead making, and more. We have 3 days with event stuff happening!!!

All events take place indoors at the Zilker Botanical Gardens
 2220 Barton Springs Rd, Austin, TX
 (except the hive touring, of course)

Products of the Hive Workshop:
Friday, August 19th
from 1:30 to 4:30 p.m.

\$25 - Learn how to make lip balm and tea light candles, get some easy recipes, and more. Hands on and you will take products home! (Class is limited to 50 participants, MUST pre-register by August 15th).



Tabitha Masker and Pamela Yeaman at the 3rd Annual Tour de Hives.

The 2016 Tour de Hives is sponsored by:
Travis County Beekeepers and Bee Friendly Austin.

This event is a yearly fundraiser with proceeds donated to nonprofit(s) dedicated to helping bees, beekeeper and public education, and bee research.

Please make checks or donations to:
Travis County Beekeepers Association



4th Annual Tour de Hives - Public Event:
Saturday, August 20th
from 9:00 a.m. to 4:00 p.m.

A day full of speakers in the Auditorium, Vendors with products in the Green Room, an observation hive with a live colony, Honey Queens & Princesses, Learn about REAL Texas Honey, Honey Tasting, Silent Auction, & Raffle Prizes - something will be happening all day, check the schedule on the tour website.

There will also be lots of bee yards to tour from Dripping Springs to Georgetown and more!

Admission to the event is **\$5** per group of up to 5 people and **\$1** for any extras traveling in same group! (1 tour map per group) - Buy tickets and sign waivers online or in person, on day of event, at Zilker Botanical Gardens. <http://www.TourdeHives.org>

Beekeeping Educational Seminar:
Sunday, August 21st
from 9:00 a.m. to 4:00 p.m.

\$40 Early Registration by August 15th or **\$50** at the door. Classes for those interested in becoming a backyard beekeeper. How to get started, What to buy and where, Setting up the bee yard, Getting & Installing Your Bees, Bee Friendly Plants, Bee Nutrition & Feeding, Honey Extraction, Products of the Hive, and more! Schedules & Speakers will be posted on the event website! (We are also planning to offer a catered lunch from Rudy's BBQ as an add on item, if desired for **\$10** for the Early Birds - must PRE-PAY) <http://www.TourdeHives.org>

Travis County Beekeepers Association (TCBA) was founded in 2014 and exists to promote common interest and general welfare of beekeeping, to protect honey bees, to educate beekeepers, encourage good bee management practices, and to encourage good relations between beekeepers and the public. Travis County Beekeepers Association is a non-profit organization serving the beekeeping community in the greater Austin and Travis County areas. Travis County Beekeepers Association is a member of the Texas Beekeepers Association and the Austin Area Garden Council.

Tanya Phillips, Beekeeper
www.BeeFriendlyAustin.com
 512-560-3732
tanya333@me.com



John Swan and a hive visitor checking out a top bar hive at last year's Tour de Hives.

Do you Smell Garlic?

Mosquitos vs. Honey Bees

by Mary Catherine Gardner



photo credit: Diet and I

Summer is the season when I always hope to have a chance to slow down and relax. Ideally, my days (or at least my weekends) would be filled with trips to the lake, lounging poolside, hiking, biking, picnicking, barbecuing, camping, gardening, or even just being lazy and relaxing in a hammock. I love doing all these things, but each one seems to be an invitation for mosquitos to join me!

One day recently, when I was driven inside by a particularly bloodthirsty swarm of mosquitos, I took to the internet to research some solutions. Let me start by saying, on any given day in my neighborhood, I can smell garlic on the wind when I walk outside. This is a big fad in my area for mosquito control, with homeowners believing these types of pest control products are organic and safe. With all the news about West Nile and Zika virus, I can understand their motivation behind wanting to eliminate the pests.

Terminix describes its monthly treatment as "a spray based on plant sugars and garlic [that] will kill disease-causing insects. The insects are drawn to the sugar, feed on it, and die from the garlic." Barefoot Mosquito says their product is an "organic-based, 99.5% natural mosquito control system that minimizes pesticide usage and is environmentally responsible."



Another problem with this approach is the potential for garlic to mask floral scents, thus confusing bees, rendering them unable to locate food sources, and resulting in them spending more time out foraging and bringing home less food.

Yet another problem occurs if your pest company does not adhere strictly to application recommendations regarding best time to spray and where to spray. If they are spraying before dark (which I assume most are working 9:00 to 5:00) or they spray blooming plants, then honey bees are highly likely to come into contact with the pesticide.

What can you do?

The following are just a few, of many, natural solutions that can help you, and your bees, have a safer and more enjoyable summer:

Let your neighbors know you have bees - they might be willing to change their habits if they realize they are harming bees.

Educate people about the importance of the time of day when treatments are applied - near dark is the best time because hopefully your bees have returned home from foraging and this is the time mosquitos are most active.

Encourage people to choose solutions that are bee safe: Granular applications are safer than spray formulations, which are safer than dusts, which can drift (a problem that leads to pesticides ending up in water and on blooming plants where bees feed).

Eliminate stagnant water that can breed mosquitos, and if you leave water out for your bees (which they would greatly appreciate), replace it with fresh water often so mosquito larvae don't have a chance to hatch.

Plant mosquito repelling plants around your yard and in your garden:

Basil:

strong bug-repelling scent even without crushing the leaves; basil essential oil is toxic to mosquito larvae



Citrosium:

this plant is also known as "Mosquito Repellent Plant"



Lavender:

mosquitos hate the smell; the lavandin variety contains high levels of camphor



Lemon balm:

contains high levels of citronella



Marigolds:

contain pyrethrum, an ingredient found in many insect repellants



Mint:

keeps mosquitos away; mint essential oils help soothe bug bites

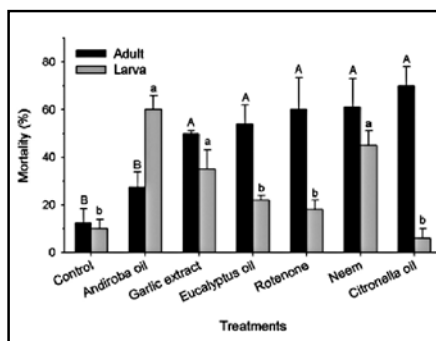


Sage:

burn this herb and the scented smoke repels mosquitos (Rosemary works too)



photo credits: Country Living



Effects of botanical insecticides on honey bees. Only andiroba oil demonstrated no lethality in adult workers.

The problem with organic pesticides is they still harm bees! Garlic extract has proven to be toxic to bee larvae, resulting in lower body mass and decreased rate of walking in adult workers (*Oxford Journal of Insect Science abstract*).

20th Annual Field Day at the USDA Honey Bee Lab in Baton Rouge

The USDA Honey Bee Breeding, Genetics and Physiology Laboratory and the Louisiana State Beekeepers Association will hold the 20th Annual Field Day on Saturday, October 8, 2016. The event will be held at the laboratory, located at 1157 Ben Hur Rd. This is near the intersection of Nicholson Drive (Hwy 30) and Brightside Dr., which is about two miles south of the LSU football stadium.

Gates will open at 9:30 a.m.; activities are scheduled from 10:00 a.m. to 3:30 p.m. A nonrefundable pre-registration fee of \$30.00 is required for attendees 12 years of age and above. Children eleven and under, must stay with their parents at all times. You must pre-register (and submit payment) by September 30, 2016. You may register online at labeekeepers.org and pay through PayPal or credit card or you may mail your registration form that is located on the labeekeepers.org web site and your check payable to the Louisiana Beekeepers Association to: David Ferguson, P.O. Box 716, Brusly, LA 70719. Registration fees increase to \$40.00 per person on October 1, 2016.

The registration fee covers expenses including coffee, pastries and a great catered lunch that includes boneless chicken in gravy, white rice, snap beans and potatoes, a medley of tomatoes, baby lima beans, okra and corn with sausage, and garden salad with choice of 4 dressings, fresh baked honey wheat rolls, banana pudding and coke products.

The Field Day will include courses for beginners and more experienced beekeepers as well as workshops for those interested in a variety of topics. The beginning beekeeper course will begin with how to get started for those who do not yet own bees, then will progress to how to manage a few colonies. Topics will include equipment needs for the beginner, nectar producing plants, maintenance of colonies, pests, safety and etiquette in beekeeping, and hands on training in an active colony. The intermediate beekeeping course was a hit again last year and it will be offered again with a variety of topics focused on the beekeeper with a moderate amount of experience that is now ready to take it to the next level. Topics will include making splits, preparing colonies for winter, bee breeds, followed by a final "field" session examining open colonies. This session will address the major problems in colony health and include discussion and guidance on the primary pests and pathogens affecting honey bee colonies. There will be also be a 2 hour focused workshop on queen rearing for those (typically the more advanced beekeepers) not attending the intermediate courses, followed by a final session on breeding basics. These workshops will represent both the USDA-ARS Bee Lab's research and beekeeper experiences.

For additional information please contact Dr. Lanie Bourgeois (225-767-9299), Sandra Hineman (225-767-9280) or Joe Sanroma (318-346-2805). For questions regarding online registration, please contact David Ferguson (225-726-1664) or Robert Taylor (985-386-4647).



Seven Methods of Varroa Mite Transmission

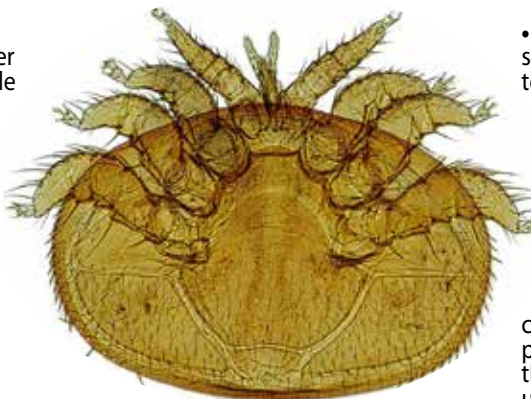
By Permission from Rusty Burlew of Honey Bee Suite (www.honeybeesuite.com)

Considering they have only stubby little legs—and no wings, fins, or driver licenses—Varroa mites have no trouble getting around. In fact, they have an entire public transport system built and maintained by the very host they parasitize. Seems unfair, doesn't it?

While many routes of migration from colony to colony have been documented, some are more important than others. Here's a list of common ways mites get around, and there may be others.

- **Mites on flowers.** Of all the possible methods of mite transmission, this one seems the least likely. Mites are attracted to the pheromones of bees, so it seems far-fetched that a mite would jump off a bee onto a flower and wait for another bee to arrive. However, if a Varroa-laden bee lands on a flower and begins to groom, it is possible that she will dislodge a mite. If so, that mite has no choice but to wait for another honey bee to come along and give her a lift. Surely this happens from time to time, but it's probably not a major means of transmission.

- **Beekeeper assist.** Beekeepers can easily move mites between colonies when they exchange frames of bees or brood between hives or when they make splits.



- **Drifting.** Not all honey bees make it back to their own colony. It is well known that if you have a row of hives, the hives on the ends will slowly gain population while the ones in the middle lose it. If these lost bees are carrying pollen, nectar, or other needed stores, they are usually welcomed into the new colony. The unseen gift, though, may be phoretic mites tucked between the bee's segments which are happy to jump off and make themselves at home.

- **Drones.** Unlike foragers, drones are not too particular about where they spend the night. Drones are very likely to stop in at any old colony and the foragers usually let them in. Wandering drones may be a major mode of mite transmission.

- **Swarming bees.** If a colony has mites, so will the swarm. It only takes one mite to begin a new infestation.

- **Abscending bees.** Bees don't always abscond in massive groups like a swarm, but may leave a hive in onesies and twosies. This can happen when a colony is collapsing from disease or parasitism, when the bees are starving, when a colony remains queenless for a long period, when a colony is decimated by bears or other predators, after fire or flood, or whenever the bees' home is destroyed or becomes uninhabitable. The bees fly off and some may be lucky enough to find another colony to join, carrying with them their trove of mites and/or other diseases.

- **Robbing bees.** Whenever a bee colony becomes weak it is a potential target. Bees from healthy robust hives are often eager to empty out the pantry of a weaker hive and ferry the treasure back home, a form of kleptoparasitism that is greater in some races of honey bee than others. Oftentimes the weak hive is riddled with Varroa mites, and it may even be collapsing for that reason. The robbing bees end up with more than they bargained for, taking home both honey and a blood-thirsty population of Varroa mites. The take-home message is that your colony can pick up an infestation of Varroa at nearly any time of the year. The best practice is to monitor your hives regularly to see if you have a problem, and then decide on a course of action if you do.

Veiled in this fragile filigree of wax is the essence of sunshine, golden and limpid, tasting of grassy meadows, mountain wildflowers, lavishly blooming orange trees, or scrubby desert weeds. Honey, even more than wine, is a reflection of place. If the process of grape to glass is alchemy, then the trail from blossom to bottle is one of reflection. The nectar collected by the bee is the spirit and sap of the plant, its sweetest juice. Honey is the flower transmuted, its scent and beauty transformed into aroma and taste.

Stephanie Rosenbaum



THE BUDS AND THE BEES EXCITING, TASTY VARIETAL HONEY

by Becky Bender, Texas Master Naturalist

While most Texas honeys contain multiple floral sources, some plants provide exciting, single-source honey.

Of course the best-tasting honey is YOUR honey. You know that. Your friends and family know that. And by now, you're probably enjoying your sweet rewards of the past year's work. You may be entering a honey contest, restocking eager retailers or sharing your bounty with neighbors. It's safe to say that most of us who just harvested are enjoying a mixed wildflower honey. But varietal honey—also referred to as a single-source, monofloral or unifloral honey—is also exciting and tasty.

The great majority of beekeepers are hobbyists or run rather small scale operations. We tend to keep our bees in one location and harvest once each year. Most of our honey may be called all-season honey, mixed floral, or simply wildflower honey because the nectar is from a variety of flowers that bloom through the seasons. On the other hand, varietal honeys are more commonly produced by commercial beekeepers. Very few commercial beekeepers can make a living by keeping their bees in one location. In addition to transporting bees for pollination, these market-driven beekeepers move their bees to various locations throughout the year to capture an abundance of single-variety flowers and crops that bloom for short periods of time. Honey produced this way is called varietal honey.

While true varietal honeys in Texas are uncommon, some of those you may have heard of include Mesquite, Clover, Cotton, Orange Blossom, Guajillo, and Tallow. As expected, such varietal honeys differ in color, flavor and aroma due to the nectar of their particular flower. Honey color may range from nearly colorless to dark brown, flavor may vary from mild to bold and aroma may be mildly reminiscent of the namesake flower. Surprisingly however, just like grapes and wine, the same flower growing in the same location may produce a slightly different nectar taste from year to year based on soil elements, temperatures and moisture. So even the same varietal honey from the same location may vary slightly each year.

Now it's time to grab your tasting spoon and take a virtual tour of a few exciting varietal honeys to better appreciate their plant origins, honey characteristics and culinary uses.

Guajillo (*Acacia berlandieri*)

Also called thornless catclaw or huajillo, this native desert tree grows in the dry soils of sunny, southwestern Texas. Unlike the heavily thorned Catclaw, Guajillo is "almost" thornless. It can reach a height of 15 feet in an irrigated landscape but is much



*Guajillo (*Acacia berlandieri*)*

shorter in its dry desert habitat where it blooms in March and April with fragrant creamy-white round puffs of flowers.

Guajillo honey is a light golden amber color with a cloudy appearance and high pollen content. It has a distinctive taste that some describe as mild with a bit of cinnamon spice and fruit jam flavor. Suggested culinary uses include appetizers with Brie cheese, pecans and crusty bread or an entrée of pork glazed with Guajillo honey.



Orange Blossom

Orange Blossom (*Rutaceae citrus*)

Citrus trees, especially oranges, have been around since about 2500 BC. Cultivated in Asia, then later in Europe, Spanish explorers brought oranges to Florida around 1870. Today Orange Blossom is a leading honey source in southern Florida, Arizona, California and Texas. The Texas citrus industry is concentrated in the Lower Rio Grande Valley. While spring Orange blossoms sometimes produce a single-source honey, often the honey is a combination of oranges and other citrus blooms including those from nearby grapefruit, tangerine or even lime and lemon trees. Citrus trees can grow in various types of well-drained soils but will survive only in the warmest climates of Texas where temperatures stay above the mid 20 degree mark. Interestingly, most varieties of citrus are self-fertile and don't require insect pollination.

Orange blossom honey can vary from a light to a medium golden amber color depending on the soil of origin. The distinctive, sweet flavor is described as warm, floral and fruity and has the fragrance of an orange grove in full bloom. Orange blossom honey is seen widely on dining tables for everyday use and makes an excellent honey-butter spread. It's also used as a tasty glaze for ham and a sweetener for cakes and cookies.



White Clover (Trifolium repens)

Clover (*Melilotus and Trifolium*)

America's most common and popular varietal honey – Clover honey – is sometimes produced in Texas. Commercial beekeepers, however, find it worthwhile to transport their bees to Northern and Midwestern states to gather Sweet clover, known as the “king of clovers”, and White clover. Though several varieties of clover have been imported to the US from Europe, only a few are suited to southern states and even fewer grow in mass in Texas. Those that are adapted to north, central and eastern regions of Texas are: Sweet clover (*Melilotus albus*), Crimson clover (*Trifolium incarnatum*) and White clover (*Trifolium repens*). Crimson clover is the variety used most often in southern states for soil improvements and erosion control, but it's difficult to capture a single-source honey from this variety since it blooms at the same time as other plants our bees also favor.

Clover honey can vary slightly in color and flavor depending on where it's produced. It has a pleasing yellow color with a taste described as buttery and an aroma that is both floral and plant-like or grassy. Clover honey is delicious with salty cheeses such as Pecorino. It makes a good honey vinaigrette to dress a salad of fresh spring greens tossed with pears and walnuts or a topping to drizzle over a caramel or pecan ice cream.

I know I have not changed your mind. YOUR honey is still the BEST honey. But if I've whetted your appetite just a little, you can continue this virtual tour of exciting and tasty varietal honeys through a current, beautifully written book with a guide to more than 30 varietal honeys and recipes. The book is ***The Honey Connoisseur: Selecting, Tasting and Pairing Honey*** by Marchese and Flottum. Co-author Kim Flottum is the editor of Bee Culture Magazine.

Your questions, comments and photos are welcome and may be used in future articles.

Please send to Becky Bender at RBenderRN@aol.com or www.BudsAndTheBees.com.

nozevitTM Plus

**Your partner in helping maintain the
intestinal Well-Being and Integrity of
your honeybee Colonies**

Contains:

- All Natural Plant Polyphenols
- Phytonutrients
- 3 Essential Oils
- Complete Amino Acids
- Vitamins and Minerals



**NO GMO
or HFCS!**

AS LITTLE AS \$27 PER USE.

**Simple, Effective and Economical.
Apply early Spring and late Fall
via drench or in feeder. Add to protein patties.**

 **Dadant.com**
 **eKoBeekeeping.com**
For more information - (907) 727-8200

Greetings from Dr. Juliana Rangel at Texas A&M University

Assistant Professor of Apiculture, Department of Entomology, Texas A&M University

Howdy, TBA members! I hope you are having a wonderful summer and are managing to stay warm through these hot summer days! We have had a very busy summer, with most students and myself either traveling for conferences, teaching, or work. Here are some updates of what's been going on in the last two months, and what's ahead for our lab this summer.

On 7-29 June 2016 I was co-instructor of the TAMU Study Abroad Course of Tropical Conservation Biology in the Caribbean Island of Dominica, West Indies. This intensive course allows students to get first-hand experience on conducting independent and group research while learning about the natural history of this wonderful island. Adrian Fisher was the teaching assistant for the course, and he proved to be invaluable in the data collection and analysis for most student projects. Because of this teaching commitment both Adrian and I were unable to attend the TBA Summer Clinic. From Pierre, Liz and Lauren, who represented the lab, we heard that the clinic was very well attended and had a great lineup. Congratulations on hosting another successful event!

I attended the International Conference on Pollinator Biology, Health and Policy at Penn State University from 18 to 21 July 2016. This conference, which takes place every three years, is one of my favorite bee/pollinator meetings because it brings researchers from abroad and from all over the United States that not only present new research on pollinator health, but present plans for best management practices regarding Integrated Pollinator and Pest Management programs (IPPM is kind of a new term, it's kind of "hot" right now). I presented research on the *Nosema ceranae* and *N. apis* levels in feral vs. unmanaged honey bee colonies that we have been able to locate near the Powdermill Nature Reserve in southwestern Pennsylvania. I highly recommend this conference to any of you who like to be

"in the know" regarding the state of pollinators in the US and abroad.

After that meeting, I flew to Charleston, SC, where I was invited as the keynote speaker for the Annual Summer Conference of the South Carolina Beekeepers Association.

The meeting, which took place on 22 and 23 of July, was held at Trident College in North Charleston and had approximately 400 participants from all over the state. The beekeepers seemed very interested in my presentation regarding queen and drone health, and had lots of excellent questions. Other speakers included Dr. Reed Johnson from The Ohio State University, Dr. Jennifer Tsuruda from Clemson University, among others. It was great to interact with the beekeepers, and I even had a "free day" on Sunday to see the beautiful architecture of downtown Charleston!



Colleagues at the International Conference on Pollinator Biology, Health and Policy at Penn State University.

From left to right: Dr. Rangel, Dr. Dennis vanEngelsdorp (U Maryland), Dr. Marla Spivak (U Minnesota) and Dr. Elina Niño (UC Davis).



Colleagues at the South Carolina Beekeepers Association Annual Summer Conference in Charleston, SC.

From left to right: Dr. Jennifer Tsuruda (Clemson U), Dr. Reed Johnson (The Ohio State U), Dr. Dan Schmehl (Bayer Crop Science), and Dr. Rangel.

On 7-11 August I will be attending and presenting at the International Union for the Study of Social Insects European Conference in Helsinki, Finland. I will be presenting results from our study on the pesticide residues found in nectar and pollen collected by urban bees. After that, I will be taking a week off to visit colleagues in Germany. I will thus have sporadic access to email but I will try to get back to you as my time permits.

Lastly, it is with great sadness that I have to inform you that Lauren Ward will be stepping down as apiary manager for our lab at the end of August. She has been an invaluable asset to our research and teaching group, and we are going to miss her dearly. She has accepted a position working outside of academia and we wish her the best in her new endeavors. We will keep you updated as to the future of the online Honey Bee Biology course and whether we can locate a permanent replacement for the position of apiary manager. For now, ET Ash has once again come to the rescue and will be helping us out with beekeeping needs this Fall until we have a more permanent person to help us out next year.



Dr. Rangel won a door prize (a hive stand!) at the South Carolina Beekeepers Association Annual Summer Conference in Charleston, SC!

That is all for now folks! If you have any questions, it is best for you to email me at jrangel@tamu.edu, as my schedule is very variable and I am often out of my office and away from my phone. For the most up-to-date information regarding Rangel Lab news and activities, and interesting research that comes out of our lab and from others around the world, please visit us on Facebook at <https://www.facebook.com/TAMUhoneebeeelab>.

Thank you all for your continuing support, and as always, happy beekeeping!

Keeping the Colony Cool

from Catch The Buzz

When a honey bee colony gets hot and bothered, the crisis sets tongues wagging. Middle-aged bees stick their tongues into the mouths of their elders, launching these special drinker bees to go collect water. That's just one detail uncovered during a new study of how a colony superorganism cools in hot weather.

Using light bulbs to make heat waves in beehives, researchers have traced how honeybees communicate about collecting water and work together in deploying it as air-conditioning. The tests show just how important water is for protecting a colony from overheating, Thomas Seeley of Cornell University and his colleagues report online July 20 in the *Journal of Experimental Biology*.

Water collection is an aspect of bee biology that we know little about, says insect physiologist Sue Nicolson of the University of Pretoria in South Africa. Collecting pollen and nectar have gotten more attention, perhaps because honey bees store them. Water mostly gets picked up as needed.

Bees often get as much water as they need in the nectar they sip. But they do need extra water at times, such as during overheating in the center of the nest where eggs and young are coddled. When researchers artificially heated that zone in two colonies confined in a greenhouse, worker bees fought back. They used their wings to fan hot air out of the hive. "You can put your hand in the opening of a hive on a hot day and feel the blast of air that's being pushed out," Seeley says. Several hundred bees also moved out of the nest to cluster in a beardlike mass nearby. Their evacuation reduces body heat within the nest and opens up passageways for greater airflow, he says.

The bees also had a Plan C — evaporative cooling. Middle-aged bees inside a hive walked toward the nest entrance to where a small number of elderly bees, less than 1 percent of the colony, hang out and wait until water is needed. Heat by itself doesn't activate these bees, especially since they're not in the overheating core. Seeley now proposes that the burst of middle-aged bees' repeated begging for water by tongue extension eventually sends the water-collecting bees into action. They return carrying some 80 percent of their weight in water. "The water carrier comes in looking really fat, and the water receivers start out looking very skinny," Seeley says. "Over a minute when the transfer takes place, their forms reverse." Then the receiving bees go to the hot zone, regurgitate their load of water and use their tongues to spread it over the fevered surfaces.

In a water-deprivation experiment, bees prevented from gathering water could not prevent temperatures from rising dangerously, up to 44° Celsius, in their hive. When researchers permitted water-collector squadrons to tank up again, colonies could control temperatures. Even for multitasking bees, water is necessary for cooling, the researchers conclude.

After a severe heat stress, the researchers noticed some bees with plumped-up abdomens hanging inside the colony. "Sometime they would be lined up like bottles of beer in the refrigerator," Seeley says. Bottled beverages is what they were, he argues, storing water and remaining available if the coming night proved as water-stressed as the day.

"Honeybees continue to amaze," says Dennis vanEngelsdorp of the University of Maryland in College Park, who studies bee health. "Even after centuries of study, we have something new."

BROKER/APPRaiser FOR THE BEEKEEPING INDUSTRY



MORRIS WEAVER ENTERPRISES

11625 Princess Margaret Ct.
Montgomery, TX 77317

Phone/Fax 936.448.8061
Mobile 936.825.4738

www.morrisweaver.com
rmorrisweaver@gmail.com

Chief of Apiary Inspection - Texas Apiary Inspection Service

from Mark Dykes



Greetings from the Texas Apiary Inspection Service (TAIS)

I hope everyone is staying cool out there in the bee yard this summer (or at least cooling off after the bee yard). We are heading into a dearth in parts of Texas so make sure to check your bees for food stores and feed as needed.

Here at TAIS we are steaming full speed ahead with the new diagnostic lab. Mary has hired two part time technicians and trained them to process samples. We are set up to sample for varroa mites and nosema. One of the first sets of samples we ran was from the Texas Master Beekeeper Program hives we manage. I am happy to report we had a significant reduction in mites after treatment! On that note if you haven't checked your mite levels recently it would be wise to do so. There are several methods you can use in the bee yard. Please check out the Tools for Varroa Management (<http://honeybeehealthcoalition.org/Varroa/>) for a step-by-step guide of how to monitor for mites as well as a comprehensive list and information on all legal varroa treatments on the market (both organic and synthetic). I am also pleased to announce we just wrapped up filming on videos to accompany the guide. The Honey Bee Health Coalition is working with a production company to put the final touches on the videos and will post them soon. Keep an eye on our website, we will post them as soon as they come out (<http://txbeeinspection.tamu.edu>).

Remember mite control is the single most important thing you can do as a beekeeper to help promote good hive health.

Finally, I would like to commend the Texas Beekeepers Association (TBA) for forming a committee to review the current honey bee laws and to discuss and put forth needed updates and changes to better the law. The last time TBA attempted this there was a good deal of confusion on what exactly was proposed and what was already part of the law. Please keep an eye out for information from the committee to help clarify the proposed changes. A majority of the changes will affect commercial operations and have little to no impact on small scale operations. The overall intent of the changes is to streamline the cumbersome permitting process and to update some out-of-date sections. TAIS is happy to work with the TBA to update the current laws but the proposed changes will be those that TBA puts forth.

Well that's all for now, we hope everyone has a successful summer and we look forward to seeing everyone at the TBA meeting in November. As always if you have any questions or know a good bee joke please don't hesitate to contact us (TAIS@tamu.edu) and keep on keeping those wonderful bees!

Williamson County Area Beekeepers Extracting Workshop

from Jimmie Oakley



THE REVOLUTION BOX

Everything
Except
Bees

SHASTINA MILLWORK

SUPERIOR
DURABILITY

- * Ask about our unique GUARANTEE
- * Ponderosa Pine Products (kiln dried)

1⁵/₈"

Top
Box
Joint

- * Any Size
- * Any Quantity

Now
Making
Frames

- * Manufacturer direct
- * Nationwide shipping
- * Assembly, paint,
branding optional

877-789-7526 Toll Free
www.shastinamillwork.com



2016 Texas Honey Queen Hope Pettibon

Bee Venom

When I was 1 years old, my mom and dad noticed that my left ankle looked swollen and I was limping when I walked. They took me to the doctor who diagnosed me with Juvenile Rheumatoid Arthritis. I was on a strong anti-inflammatory medicine for one year before I went into remission. I spent my whole childhood going to Scottish Rite Hospital every 6 months or every year. However, the pain and swelling came back when I was about 12 years old, and my arthritis has now gone to my other ankle, my jaw, and my hands. Someday I might try using bee venom therapy to help with my arthritis, if I can get my guts up.

If you're a beekeeper you have probably been stung by a honey bee. I know I have. Well, we all know that it can sometimes hurt... But did you know that bee venom is more than just a hurting bump on your skin or something that makes you swell up?

There are many things that Bee venom can help with, and probably much more than we know. It can help rheumatoid arthritis and damaged nerves. It also helps with people who are allergic to bee stings to build immunity to the bee venom. It can help with nerve pain (neuralgia) and multiple sclerosis (MS), as well as swollen tendons, which can sometimes feel like arthritis. Bee venom has been used since ancient times to also treat rheumatism, back pain, skin diseases, Lyme disease, and chronic fatigue syndrome. However, more research is needed to support the use of bee venom for these uses.

Bee venom is made by bees and has a lot of enzymes, peptides and biogenic amines. There are at least 18 active ingredients in bee venom which have some medicinal properties. The way the venom works is not completely known yet, but scientists believe it can adjust the way the immune system functions in the body and contribute to increased cortisol production. Side effects include itching, anxiety, dizziness, trouble breathing, chest tightness, heart palpitations, vomiting, nausea, diarrhea, sleepiness, fainting, confusion, and low blood pressure.

The normal dosing for bee venom therapy is to get 20 bee stings, three times weekly, for up to 24 weeks in the area of your injury, or go to a doctor and get an injection of bee venom. You can also get it in the form of a cream. Bee venom is most effective when it comes directly from the live bee during the late spring to



*Hope Pettibon, Texas Honey Queen
Megan Pettibon, CCHBA Honey Queen*



*Summer Clinic Registration
Holly Medina, Dick Counts and Shirley Doggett*

early fall season when bees have a good pollen source to produce potent venom. The shot under the skin usually will not cause as bad of a reaction as it would getting the 20 bee stings. Either way, you should have someone there who is carefully watching you to see how you respond. Most people have a reaction to the venom including pain, itching, swelling, inflammation, and redness. These desired reactions show that you are responding to the venom. Be careful of anaphylactic reactions which are life threatening, but are rare.

If you have an auto-immune disease, ask your doctor before using bee venom, because some people have said that it makes their auto-immune disease worse by causing the immune system to become more active. This can increase the symptoms of auto-immune diseases, so make sure that you research before using bee venom therapy because there are basic guidelines that you need to follow.

I have enjoyed learning about bee venom therapy which is an alternative form of healing, and can be used when the patient does not respond to conventional treatments. If I ever get my guts up to try it on my own hands, I will let you know how it goes. I think I could do it if I could get past the first 10 stings or so, then my hand would be numb and I would not feel the rest of the stings... Ha!

<http://www.webmd.com/vitamins-supplements/ingredientmono-972-bee%20venom.aspx?activeingredientid=972&>

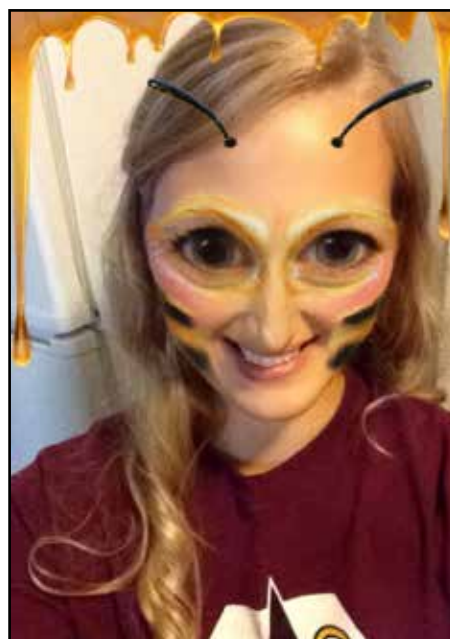
<http://www.beevenom.com/beevenomtherapy.htm>



*Hope Pettibon
"Extracting Our Honey"*



*The TBA Table at the Summer Clinic
Myra Burke, Hope Pettibon and
Willow Lanchester*



Hope Pettibon Transformed !

2016 Texas Honey Princess Willow Lanchester

Good Bye Lemonade Stands, Hello Beekeeping



With this continuously changing world it is time for a new way of teaching entrepreneurship and work ethic to the students of our communities. What better way than through beekeeping? Beekeeping is an art that can teach someone so much about life and the world. I remember learning the responsibility of taking care of the hive and the work ethic of the bees and the beekeepers alike. Students can learn so much from beekeeping whether it is the calm control of going through the hive or a little bit about business by bottling and selling the honey. Bees can teach us plenty about our eco system, teamwork, building communities, and how to take care of our own environments. Here are a couple of programs whose aim was to teach students just that.

One is the Goodman Youth Farm, in Madison, Wisconsin. The Goodman Youth Farm is a non-profit organization that educates youth about urban farming, nutrition, nature, and beekeeping, through hands on learning activities. They offer field trips to many groups including, middle schools, high schools, and juvenile corrections. On these field trips the students are able to learn about gardening, agriculture, and learn about beekeeping first hand. With these field trips large groups are able to observe hive demonstrations from a distance. Smaller groups are provided with a more in depth learning experience as they get to suit up and go through the hive with the beekeepers. The Goodman Youth Farm also provides beekeeping workshop days for students who sign up. A typical work shop at the farm involves many aspects of pollination and beekeeping. At the beginning of the day the students get to learn about mason bees and other natural pollinators to acclimatize them to the bees. Soon after the students get to suit up and go through the hive. During the hive check the students learn all about the biology of the honey bees, hive structure, honey production, and basic beekeeping skills. After going through the hive the students get to learn about the entrepreneurial side of beekeeping by making lip balms. The students will end their mornings by learning to cook with honey and learning about its nutritional value [1]. The Goodman Youth Farm is an incredible program that is educating students from all different backgrounds about the importance of bees and beekeeping.

Another noteworthy youth beekeeping program is located in Philadelphia, Pennsylvania. This program is put on by the Philadelphia Beekeepers Guild and is the Woodland community

supported apiary, which provides students with the opportunity to learn about bees and beekeeping and obtain hands on experience. This student community supported apiary is a collaboration between beekeepers and urban farmers to help teach kids about bees [2]. Students are provided with the opportunity to begin beekeeping without having to travel far from home. It also makes it affordable for students because they do not have to input the money into acquiring the equipment or the bees. This creates an exciting program that the students could attend and work on, after school and on the weekends. The students learn all about the care and maintenance of the hive and the production of honey. When extraction time rolls around the students are able to learn all about the marketing and sales of honey as well. All in all, it is an amazing program that once again succeeds in teaching students about the importance of bees.

I found these youth programs fascinating, and I found myself imagining how similar programs could be implemented in my community. The growing trend of urban beekeeping opens the doors to so many different possibilities. It creates opportunities to reach many new people from so many areas that formerly would have had little to no contact with honey bees, let alone beekeeping. It makes it possible to become a beekeepers without having to own land in the country. It makes it possible to create youth programs like the Goodman Farm and the Woodland student community supported apiary. Imagine instead of having the standard run of the mill after school programs that are so prevalent, if students could go learn a new skill that they could take with them for the rest of their life. Having a program which teaches the responsibility of beekeeping and a love of nature could impact a community in numerous beneficial ways. In my experience bees are a truly incredible catalyst for educating students. Wouldn't it be amazing if more students could have access to resources like these?

[1] <http://communitygroundworks.org/>

[2] <http://www.makingbeehives.com/blog/philadelphia-beekeepers-starting-youth-program>



*Willow with an Observation Hive at
Covington Nursery*



*Queen Hope and Princess Willow at
Encaustic Painting Workshop*



*Princess Willow gives Presentation at
Mineola Public Library*

Honey Bee Circadian Rhythms *from Catch the Buzz*

Circadian rhythms are internal clocks that determine many of an organism's daily rhythms, for example sleep-wake, feeding, urinary output and hormone production. Aligned with the environment by external forces such as sunlight and ambient temperature, circadian rhythms are important for animal health and survival. Disturbances of the circadian clock are associated with a variety of diseases in humans and animals, including cancer, mental illnesses and metabolic disorders, such as diabetes and obesity.

The dominant role of light in adjusting the circadian rhythm to the local environment has consistently been emphasized in studies on individually-isolated animals in laboratories. Interactions with others of the same species, while very important for animal survival and fitness in nature, are not considered important external stimuli that affect the animal circadian clock.

Now, a study conducted by researchers from the Hebrew University of Jerusalem and published in the journal *Nature Communications* challenges this view.

The researchers performed a set of large scale experiments in which they manipulated social interactions and light exposure for more than 1,000 honey bees in cages, or in freely foraging colonies housed in observation hives, allowing research in an ecologically relevant context. Every experiment was repeated two to four times, each with bees from a different source colony (which were genetically different).

"We show for the first time that social time cues stably adjust the clock, even in animals experiencing conflicting light exposure and social cycles," said Prof. Guy Bloch from the Department of Ecology, Evolution & Behavior at The Hebrew University's Alexander Silberman Institute of Life Sciences, who led the study.

The researchers collected a massive data set which demonstrated that in honeybees, social interactions can override potent light exposure as external cues that influence the biological clock.

The data showed that resetting the circadian rhythm by manipulating the social environment had a robust and stable effect for several days even for 2-day-old bees, which are typically active around the clock with no overt circadian rhythms. Remarkably, young bees that experienced conflicting light and social cycles showed a phase that was more similar to the social cycle. When removed from the hive and monitored individually in constant laboratory conditions, they maintained the phase of the social cycle, meaning this potent social factor does not depend on physical contact with other bees in the colony.

"This study provides the strongest available evidence for the power of social entrainment, and emphasizes the importance of studying circadian rhythms in a species-specific, ecologically-relevant context," said Prof. Bloch.

Social insects are ecologically important and offer attractive model systems for studies on the interplay between social behavior and circadian rhythms. The best evidence for the influence of social activity on the internal clock is found in dark cavity-dwelling social animals, such as bees and bats. These species may be especially responsive to social influence, because individuals may not experience ambient conditions directly, but rather rely on information received from group mates that forage outside their domicile.

This study adds to recent research showing the circadian rhythms in complex natural environments may profoundly differ from those in controlled laboratory conditions. "Studies in the real world will provide a better understanding of the function and regulation of biological clocks," said Prof. Bloch.

The study also indicates that social signals may be important time-givers for the clocks of other animals, including mammals, and could contribute to the research on sleep and behavioral disorders, as well as for the understanding of the complex life of bee societies.

2016 Save the Bee Art Contest - Winnsboro, Texas

from Bill Zimmer, Wood County Beekeepers Association

In 2016, Winnsboro, Texas held it's second annual Save the Bee Art Contest. With a thriving artist community in this small East Texas town, Bill Zimmer of Texas Gold Honey and the Winnsboro Farmer's Market thought that sponsoring an art competition would be a great way to bring awareness to the importance of honey bees.

The original idea was to get 10 artists to paint a beehive and then for 3 weeks, customers of the local farmers market would vote to determine the best hive. As the voting was going on, the local beekeepers could educate the public on how bees, through pollination, are responsible for 1/3 of our food supply. Also, customers would be educated on ways they could help by doing such things as growing bee friendly plants and using less pesticides in their own gardens and yards.

When the mission of the art contest was explained to the local artists they were eager to sign up to participate and the 10 hives were immediately placed. A few weeks later the painted hives were finished and on display at the Winnsboro Farmer's Market and at the Winnsboro Center for the Arts.

Over the next 3 weeks over 1,500 people got to view the hives. The contest ended up being promoted on the local radio and newspapers, and traffic for those 3 weeks increased dramatically at the farmers market and the arts center. People seemed to be sincerely interested in bees and especially the hard times they were having and were very thankful that that this event was being held.



Bill Zimmer, Texas Gold Honey, winner (chicken hive) Margit Iguchi, and Queen Marilyn Arnaud. Second place hive on the left by Michelle Himes and third place on the right by artist Tricia Clark



Susan Zimmer showing second place French Impressionist hive by Michelle Himes

To show appreciation for the artists and the farmers market patrons, a special reception was held in their honor one Saturday afternoon. At the reception, a honey tasting table was set up where people had the opportunity to taste 8 different honeys paired with different cheeses and fruit. A mead tasting table was also set up so everyone could sample different honey wines. A great deal of fun was had by all.

From the contest in 2015, Texas Gold Honey used all the painted hives in their bee operation. The bees loved their new homes. In 2016, some of the beautiful painted hives will be sold to raise money for the arts center, farmers market, and the new bee club (2 months old) Wood County Beekeepers Association (President Mary Smith). If enough hives are sold the Save the Bee Art Contest will become self sustaining and be around for many years to come educating consumers and helping save the honey bee.



Painted Hives in the bee yard



We Sell Honey Any Way You Need It
Bulk in Drum or Bucket

Let Us Custom Pack Honey For You

Apply for a Wholesale Account at WalkerHoneyFarm.com/wholesale/

Tired of Putting Synthetic Chemicals in Your Hives?

Use an Organic Acid Instead

Best Prices on Mite Away Quick Strips (MAQS)

We Carry a Full Line of Containers

Texas Distributors for Gamber Container



www.walkerhoneyfarm.com

Knowledge, Wisdom and the Varroa Mite

*The Continuing Journey of Two Third-Year Beekeepers
from Roger and Sue Farr, Caddo Trace Beekeepers Association*



"Good beekeepers are always learning. Great beekeepers apply what they learn and then pass that on to others." - Anonymous

We have not kept bees for as long as many of you who are reading this article. However, we strive to be great learners and to gain experience from our beekeeping experiences and others' wisdom from hard-fought battles in the beekeeping realm. The writings of King Solomon of Israel admonish us to gain wisdom and to get it at any cost. We like to gain our wisdom at the cheapest cost, and that is by learning from the successes and mistakes of others. That is the topic of this article.

Knowledge, Wisdom, and the Varroa Mite

Before diving into our topic let us give a quick commercial announcement. Have you checked your hives for varroa levels? The Honey Bee Health Coalition has a great information booklet which you can download at http://honeybeehealthcoalition.org/wp-content/uploads/2015/08/HBHC-Guide_Varroa-Interactive-PDF.pdf. The booklet gives information on varroa mites, describes methods to check varroa levels, and specifics on the available treatment options and their efficacy. Get it. Read it. Do it.

We removed our honey supers in June and checked all seven of our hives using the powdered sugar shake. We found six hives with 1 to 3 mites per 300 bees. These hives did not reach the threshold treatment level of 6 mites per 300 bees or 2%. However, when we checked our largest and best performing hive, we found 7 mites per 300 bees: time to treat. We're using Apiguard this year. It's a thymol based soft-chemical on the IPM pyramid. Apiguard is applied in two treatments spaced 14 days apart after removal of honey supers.

We checked the hives for varroa mites again in mid-July. First, we wanted to see if our Apiguard treatment was effective. Yep, it was, with only 1 mite per 300 bees down from the pre-treatment level of 7. Our other six hives had varroa levels of from 1 to 6 mites per 300 bees. We treated the two hives that were at the 2% mite load limit, again with Apiguard.

Varroa management is all about testing and then taking action based on data. We tested all of our hives and then treated three. The powdered sugar shake tests took time, especially in the July heat, but we gained proficiency with each test and produced accurate results and appropriate treatment in less than five minutes per hive. For hobbyist beekeepers like us this works well. Since we tested all our hives and only treated those at threshold level, instead of blindly treating all seven, we reduced the cost of the treatment of the hives. This is applied wisdom gained at a cheaper cost.

If you have not tested your hives for varroa levels, DO IT NOW!

Knowledge (Wisdom) Transfer

We like to distinguish knowledge from wisdom. Knowledge is the gaining and learning of facts; wisdom is knowing when and how to apply those facts. We learn knowledge primarily from books, but we most often gain wisdom directly from the experiences of other people. These people provide the context and wisdom to know how to use the knowledge and facts properly. They have stories of what works, what doesn't, and why. Jesus of Nazareth often taught in stories for this reason.

Right now we have three on-going beekeeping mentoring relationships. Two are new this year as a result of our club's NewBee courses in January. The other relationship is a carry-over from last year, a couple who have become dear friends, Clif and Sherry.

In our mentoring we usually go through the beekeeping season and teach them how to manage their bees for best results. This includes sharing with them what we are doing in our hives, whether it is requeening, varroa management techniques, or extracting honey. Our mentees often ask, "What would you do in this situation?" or, "What technique are you using to control varroa in your hives?"

We extracted honey in June. We invited Clif and Sherry to participate and learn what we did and how we did it. We have a small setup for extraction with a six frame motorized radial extractor and a home fabricated uncapping tank made from parts we purchased at IKEA, the home furnishings store. It was great fun as you can see in the photos.



Clif selects a honey frame ready for extraction while Roger looks on



Clif and Sherry feel like pros with household uncapping containers

Two weeks later we helped Clif and Sherry extract their first honey at their place. They dusted off the extractor they had bought 10 years ago and fired it up. We brought along some of our equipment, and Clif and Sherry chose to use it for their first extraction, since it was already familiar. Their extraction went well, and they had nearly three gallons of honey from their first extraction! We were all proud to be a part of their success.

Shortly thereafter, Clif and Sherry shared their new-found knowledge and hard-earned wisdom with friends who are first year beekeepers ready to do their first extraction. Clif and Sherry invited their friends to bring their full frames of capped honey to their home for extraction. Clif and Sherry used what they had learned to successfully assist their friends in extracting and bottling their honey. Knowledge and wisdom passed from Sue and Roger, to Clif and Sherry, to two new beekeepers.

One goal in mentoring relationships is to have them become good – and then better – beekeepers. The second goal is that they would become teachers and future mentors. If our mentees do not pass on what they have learned, in a sense then, we have failed. Implied, but not written, in our mentoring arrangements, is the idea that anyone we mentor will take what they have learned, apply it to their operation, and then pass it on to someone in their circle of influence. If they do not pass it on, then we have only done mentor addition, rather than mentor multiplication.

So, our admonition to you, our readers, is to mentor new Texas beekeepers. Pass on your knowledge, wisdom, and passion to teach and train the next generation of beekeepers so that we all benefit.



Sherry learns from Roger the correct angle to use on the hot knife



Smiles from Clif and Sherry's mentees who extract their first honey crop

As always, we enjoy hearing from you about your beekeeping exploits.

Roger and Sue Farr; rdfarr@gmail.com; sue.farr1@gmail.com



Texas Beekeeper Association's Club "Buzz"

from Chari Elam, Communications Coordinator

Calling all Beekeepers!

**Brazos Valley Beekeepers Association is holding its
2nd Annual Fall Beekeeping School!**

Rudder High School, Bryan TX - 3251 Austin's

Colony Parkway, Bryan, TX 77808

Saturday, September 24

8:00 am – 4:30 pm

Registration: \$50 Individual

\$80 Couple

\$15 Kids 12-17

Lunch is included and "again" provided by J. Cody's Steak and BBQ in Bryan. From what this beekeeper heard...the food is worth half the cost of admission! YumYum!

There is not a beekeeper around that has learned it all... This day school will be a huge learning opportunity for all that attend. On the list of confirmed speakers; Dennis Herbert will be sharing his firsthand knowledge of the in's and out's of the AG Exemption in Texas. Dennis should know a little on this topic since he's the author of the bill! Also, in line with Dennis' class, Joe and Lolita Bader from Fredericksburg Beekeepers Association will be giving individuals tools to use in approaching your local Appraisal District if you consider your AG Valuation unfair. They are also working hand in hand with the TBA in developing a "Guideline" to one day be utilized as a State wide standard valuation formula.

Other classes in the works for the BVBA Fall Beekeeping School...

Queen Rearing by Jay Poindexter
Hands on Hive Inspection
Swarm Removal by Michael Lopez
Simple Splits by James and Chari Elam
Why Join the TBA by Leesa Hyder
Bottling and Marketing
Landscaping for Bees
Equipment Essentials
Top Bar by Dean Cook
And more...

In talking with the BVBA President, Alvin Dean, he was very excited to tell me about a new class they've added this year involving box building. "We have worked with Mann Lake to

pre-sell complete unassembled hives for \$85. This is a telescoping cover, inner cover, bottom board, deep box and 10 RiteCell black foundation and frames all for one price" says Alvin. "When you register don't forget to choose "Add to Cart" the Unassembled Hive Kit and it will be delivered to the school for the class", Alvin said.

Chris Barnes, BVBA's Youth Program Director and Bee School Committee Chair is hard at work putting all aspects of the school together. "Our school proceeds are used to support the Brazos Valley Youth Scholarship Program. This year's class is expected to have 9 new participants, plus 3 returning students. The Youth Scholarship Program is affiliated with Brazos County 4H and is a 501(c)3 charitable entity." Chris said. The Brazos Valley Beekeepers Assn. is also very proud to have corporate sponsors who help support their youth program...Mann Lake, R Weaver Apiaries as well as Dadant and Son's. This is a good idea "ALL" clubs with youth programs should consider. These big guys are really wanting to help our clubs...all we have to do is ask!

BVBA has secured several Vendors to be onsite selling a great selection of beekeeping supplies. "Fall is a perfect time for New-Bees to absorb good information for getting bees in the spring", says Chris Barnes. "We have classes for beginner to advanced" he said. Deadline for online registration is September 21st. BUT, if you are interested in purchasing the unassembled hive from Mann Lake, pre-order deadline is September 10th. See you there! For online registration and more information, go to:

www.bvbeeks.org



Scene from BVBA School in 2015



DESERT CREEK HONEY

All-Natural, Raw
Texas Honey Products

Shop Online Now

Wholesale Honey,
Creamed Honey,
and Beehives for Sale

support@desertcreekhoney.com
(214) 886-6899
www.desertcreekhoney.com

Premium Quality
OH3

CONNECT WITH US!



QUEENS AVAILABLE YEAR ROUND

Produced in the heart  of Northern California



OLIVAREZ HONEY BEES



BIG ISLAND QUEENS

A division of Olivarez Honey Bees, Inc.

CALIFORNIA (530) 865-0298 • HAWAII (808) 328-9249 • TOLL FREE (877) 865-0298

PO BOX 847 • 6398 COUNTY ROAD 20, ORLAND, CA 95963 • OHBEES.COM



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924



*No matter what season we are here for
all your beekeeping needs!*

**-PROTECTIVE CLOTHING -COMPLETE HIVES -TOOLS
-SMOKERS -QUEENS -EXTRACTORS -BEES -JARS
& MUCH MUCH MORE**



For Volume pricing call or email Ashley
270-242-2019 ext. 213 or
aconstant@kelleybees.com

1-800-233-2899



Kelley Beekeeping
SERVING THE BEEKEEPER SINCE 1924

www.kelleybees.com

Entomology Student Discovers New Bee Species in Dominica

from Texas A&M Dept. of Entomology

posted by Rob Williams

Shelby Kilpatrick's experience studying abroad in Dominica has led to a very exciting and memorable learning experience as she discovered a new species of halictid bees during a recent trip to the country in 2015.

What turned out to be an insect collecting and identification study for Kilpatrick, a junior Entomology major, ended up being part of the study that was featured in a paper by Jason Gibbs of Michigan State University and a species being named in her honor of her new discovery.

The paper titled Bees of the family Halictidae, Thomson, 1869 from Dominica, Lesser Antilles (Hymenoptera: Apoidea), was recently published in the European Journal of Taxonomy.

Kilpatrick's discovery was a separate study, but was featured in the paper, which recognized total of 11 species of halictid bees and also recognized seven newly discovered species, which included *Lasioglossum (Dialictus) kalinago* sp. nov., *L. (D.) dominicense* sp. nov., *L. (D.) kilpatrickae* sp. nov., *L. (Habralictellus) roseauense* sp. nov., *Sphecodes diabolinus* sp. nov., *S. albifacies* sp. nov. and *Habralictus antillarus* sp. nov., and *Microsphecodes dominicanus*.

Kilpatrick said that her research work helped her to expand her knowledge of bee morphology, taxonomy, and behavior and will help to contribute more valuable information about bee species in Dominica and would help future entomologists and students studying abroad to understand the biodiversity and potentially expand on the project.

"Entomologists and future students studying abroad can use the information to identify bees on the island and potentially build on my project, as well as with their own studies," she said.

Kilpatrick heard about this opportunity to study the bees after interviewing for the Dominica trip with Dr. Woolley and talking

to Dr. Gibbs in 2014. She said that Gibbs was interested in examining the halictid specimens and needed someone to help him obtain additional bees from the island.

"It sounded like a great opportunity for me to learn more about a group of bees that I was less familiar with as well as contribute to meaningful research," she said.

Kilpatrick enjoyed studying and collecting insects and that discovering these new bee species was exciting and an amazing experience.

"Collecting insects and studying them is one of my passions. I had always thought that it would be amazing to discover a new species, but never expected that I would," she said. "I was thrilled to learn that the bees I had collected represented new species. I was also greatly honored when Dr. Gibbs chose to name one of the new bee species after me and could hardly believe it."

She said that the Dominica study abroad was great and she learned about collecting insects and gained a better understanding of what it takes in a field research career.

"Studying abroad in Dominica had several positive impacts on my academic study. I am interested in pursuing a career in entomology, especially as it relates to agriculture and natural resources research," Kilpatrick said. "The hands on field research experience that I gained as a result of this study abroad program are invaluable."

Kilpatrick will definitely be applying what she had learned in Dominica to her upper level courses and will help her in her future studies.

"This opportunity will direct my future studies at Texas A&M University and ultimately my career and future life," she said. "I would highly recommend studying abroad to any student who is considering it and has the opportunity to do so."



*Shelby Kilpatrick was
Texas Beekeepers Association
Honey Queen in 2013*

It's Getting Crowded in Here!

from Robin Young, Metro Beekeepers Association



We are having another wet year here in Texas. The consistent weekly to bi-weekly rain has really turned out the blooms and our hives are reaching full capacity a lot sooner than any other year. When we checked the beekeeping Facebook pages we are finding wall to wall statements: "Can someone come and get this swarm?" "There are bees in my house and I'm freaking out. Please help!"

We, as beekeepers, have benefited greatly from the free "PR" that the science community has been publishing. If the cries for help go unanswered, we could lose the good will the public currently has for us. There are cities that have banned beekeeping in city limits thinking that their community will be "Bee Free". What has instead happened is wild Africanized colonies have moved in and more people are getting hurt. Beekeepers are so important in the effort to control the bee population in their given area. If we get a queen that is too "hot" or Africanized, we can kill that queen and re-queen. As you get more confident in your own beekeeping, there are things you can do to help keep the general public happy to have a beekeeper neighbor and keep cities from passing ordinances that hurt our sweet bees.

Here are some tips:

1. In each of my apiaries I have at least 1 empty hive with an empty piece of honey comb. This makes the hives "smell right" and inviting to swarming bees. This year alone I have caught 3 wild swarms in just 1 of my apiaries. I know the swarms were not mine because these hives are new this year and all the queens have a clipped wing. These new swarm queens have no clipped wings. I'm thinking they must come from a swarm in a nearby tree.

2. Peek inside your hives when there is a flow going to be sure they have enough room.



- a) If they do not have room, add another super, move the divider board (top-bar hive).
- b) Harvest some honey.
- c) Split your hive and to make 2 hives. In north Texas, I do not recommend splitting a hive after the month of July. The split hive might not have enough time to build up enough stores to make it through winter.

3. Join a local beekeeping club that will help you keep up with what is going on in current beekeeping laws from City to County. Most ordinances are being written **now**. Most cities do not have anything on the books except nuisance ordinances.

- 4) Watch your clubs Facebook pages for swarms. They are free bees and if you get them before they settle in someone's home, you just saved us from a potential anti-bee advocate.

- 5) There are tons of books and DVD's on how to catch a swarm and it's a lot easier than you think.

- 6) Get with a registered bee-removal person and ask if they will let you tag along and help/learn how to do successful bee removals. They can teach you about vacuums and how to get a hive out of a tree without cutting into the tree and much more. The guys that do this work have exciting lives and, in general, are just fun to be around.

If we all pitch in, we will keep and continue to earn our communities support, trust and "honey love".

Calendula Sunburn Salve (with Propolis)

Ingredients:

2 ounces dried calendula petals

4 ounces extra virgin olive oil

1 ounce beeswax

20 drops propolis infused olive oil or tee tree oil if preferred



Till next time bee friends, keep the crowding down and spread that “honey love”.

Proverbs 16:24 Pleasant words are a honeycomb sweet to the soul and healing to the bone.

First: Place dried calendula petals in a clean jar and pour the olive oil over the top. Close lid tightly and shake to blend. Allow to sit for two weeks (I do 8 weeks and make larger quantities) until the oil turns a golden color.

Second: Strain the olive oil mixture through a clean cheese cloth. It does not hurt to let it sit 30 minutes to let the oil all drain out.



Third: Pour strained oil into a heavy double boiler and turn the heat on low. Add the beeswax and stir occasionally until melted. Add the Propolis oil or Tee Tree and stir until well blended. You can then pour it into tins or wide mouth lip balm tubs for easier application. I have used this on second degree sunburns that hurt so badly I felt like my skin was bruised. This salve gave instant relief. If you want to save a bit of money, the seeds can be found in your local garden shop for pennies. Then you are also feeding your bees with this recipe.





Texas Beekeeper Association's Summer Clinic 2016

from Chari Elam, Communications Coordinator

Pictures by Jimmy Oakley

Bring in the good speakers and they will come...

No truer words have ever been said! The 2016 TBA Summer Clinic in Conroe at the Lone Star Convention Center will go down in history as a "Home Run"! With nearly 700 in attendance, the planning committee directed by Lisa Dittfurth could not be happier. Ross Conrad started off the day with a keynote address and every seat filled with folks standing up in the back. Nearly 20 Vendors surrounded the General Assembly room and spilled out into the hallway as far as the eye could see. For the first time, TBA Member Clubs were invited to set up a promotional table showing off their clubs and giving clinic goers information on how to attend their meetings. Some of the clubs gave away door prizes and raffled off wonderful gifts. The addition of this to the clinic was well received and no doubt will be included for many years to come.



Nearly 700 folks listening to Ross Conrad

With 36 classes to choose from throughout the day, attendees didn't seem to be lacking in a place to learn. Popular classes included Honey Bee Biology and Behavior taught by Lance Wilson, with 175 sitting in. Chris Doggett never fails to fill a room and his class on How to Get Started in Beekeeping was no exception with standing room only! Annual Management with John Talbert and Simple Splits by James and Chari Elam were no different. Without exception most every class was well attended and had good reviews. Texas Honey Queen, Hope Pettibon, Princess Willow Lanchester and Jacob Cole (ETBA

Honey Ambassador) along with Club Queens and Princesses presented great information about honeybees and beekeeping to the youngsters while their folks attended other classes. Once again Anita Stepp and a crew of "many" pulled off a lunch service for 700 in less the 30 minutes! This is not a small feat when you think of all that's involved in such a task. From the responses on surveys, lunch was definitely a hit!

Door Prizes and more Door Prizes!
Each and every Vendor donated at least 1 item, and most donated several to the Door Prize drawings. Drawings were done with some of the smaller items such as Hat/Veil combo, hive tools, bottles of honey, beeswax candles, lotion bars, preserves, Beekeeping books, smokers... given out at lunch. Other items like Complete Hive boxes, Telescoping lids, Complete Garden Hive made of Cypress and the huge donation made by our President Chris Moore of 4 LIVE bee colonies were all given away at the end of the day to happy recipients!
It took a very dedicated planning committee about 6 months and countless hours and over 60 volunteers to make this such a great success. Thanks to the TBA Member Clubs that sent volunteers and of course Montgomery County Beekeepers Association for hosting once again. It's events like these that make you want to keep coming back to Texas Beekeepers Association events year after year!



Russell and Lisa Dittfurth



Directors -at-Large and Local Associations Served:

Area 1	Tammy Barr <i>tammybarrbrands@hotmail.com</i> 182 Cardinal Lane Fredericksburg, TX 78624 (325) 642-2012	Alamo Area Beekeepers Association Concho Valley Beekeepers Association Erath County Beekeepers Association Dino-Beekeepers Association Fredericksburg Beekeepers Association Metro Beekeepers Association
Area 2	Lisa Dittfurth <i>dittfurths@gmail.com</i> 12992 CR 577 Anna, TX 75409 (972) 542-4419	Caddo Trace Beekeepers Association Collin County Beekeepers Association Denton County Beekeepers Association Johnson County Beekeepers Association North East Texas Beekeepers Association Red River Beekeepers Association Trinity Valley Beekeepers Association
Area 3	Lance Wilson <i>lance@apartmentexperts.com</i> 17021 Conway Springs Court Austin, TX 78717 (512) 619-3700	Austin Area Beekeepers Association Bell/Coryell County Beekeepers Association Fayette County Beekeepers Association Heart of Texas Beekeepers Association Travis County Beekeepers Association Williamson County Area Beekeepers Association
Area 4	Leesa Hyder <i>lhyder@swbell.net</i> 82 Sandpebble Dr. The Woodlands, TX 77381 (281) 460-0344	Brazos Valley Beekeepers Association Central Texas Beekeepers Association Hill County Beekeepers Association Montgomery County Beekeepers Association Walker County Beekeepers Association
Area 5	Harrison Rogers <i>h-rogers@comcast.net</i> 5402 Greenhill Road Brookside Village, TX 77581 (281) 468-0019	Brazoria County Beekeepers Association Coastal Bend Beekeepers Association Fort Bend Beekeepers Association Harris County Beekeepers Association Houston Beekeepers Association Houston Natural Beekeepers Association
Area 6	Cameron Crane <i>cameron@camerocrane.com</i> 2300 Belvedere Dr. Baytown, TX 77520 (409) 658-3800	East Texas Beekeepers Association Deep East Texas Beekeepers Association Liberty County Beekeepers Association Marshall Beekeepers Association Piney Woods Beekeepers Association Lamar County Beekeepers Association Tyler County Bee Club Wood County Beekeepers Association

Join Texas Beekeepers Association
at *texasbeekeepers.org*
or contact Shirley Doggett at
(512) 924-5051

You Know Bees. We Know Beekeepers Insurance.

Your
TRUSTED ADVOCATE
for
**BEEKEEPING
OPERATIONS**
Large and Small

- ★ Licensed in more than 40 states
- ★ Customized coverage for all areas of your business

National Agent of Choice for the
American Beekeeping Federation
 **Trusted Choice®**
Independent Insurance Agent

**TEXAS INSURANCE &
FINANCIAL SERVICES, INC.**

800-541-9849 • www.txins.com

Contact us today to schedule your FREE insurance review.

Listing of Local Beekeepers' Associations in Texas with TBA Delegate and Regular Meeting Information Shown for Each

Please forward any changes and/or additions to
John J. Talbert, Executive Secretary, john@sabinecreekhoney.com

Alamo Area Beekeepers Association

Rick Fink - (210) 872-4569

president@alamobees.org

www.alamobees.org

Meetings: 3rd Tuesday on odd # months; at

Helotes Ind. Baptist Church

15335 Bandera Rd., Helotes @ 7 pm

Austin Area Beekeepers Association

Lance Wilson - (512) 619-3700

lww@ausapts.com

8701 North Mopac Expressway #150, Austin TX 78759

www.meetup.com/Austin-Urban-Beekeeping/

Meeting: 3rd Monday of each month

Old Quarry Library, 7051 Village Center Dr., Austin TX 78731 @ 7pm

Bell/Coryell Beekeepers Association

Dennis Herbert - (254) 947-8633

conservation1@earthlink.net

Meetings: 3rd Thursday of each month (except Dec.)

Trinity Worship Center, 1802 MLK Dr., Copperas Cove, TX 76522 at 7pm

Brazoria County Beekeepers Association

Kenneth Nugent - (979) 922-9725

418 CR 243, Angleton, TX 77515

knugent@gmail.com

bcbba@brazoria-county-beekeepers-association.com

www.brazoria-county-beekeepers-association.com

Meetings: 2nd Monday of each month at 6:45pm;

Brazoria County Extension Office

21017 County Road 171, Angleton TX 77515

Brazos Valley Beekeepers Association

Alvin Dean - (325) 668-7753

info@bubeeks.org

www.bubeeks.org

4705 Brompton Lane, Bryan, TX 77802

Meetings: 3rd Tuesday of each month (except Dec.) at 7pm

First Christian Church, 900 S. Ennis St., Bryan, TX 77802

Caddo Trace Beekeepers Association

Roger Farr - (979) 436-5310

6073 Farm Road 2348, Mount Pleasant, TX 75455

rdjarr@gmail.com

Meetings: 2nd Monday of each month at 7pm

Titus County Agrilife Extension Bldg, 1708 Industrial Rd.,

Mount Pleasant, TX 75455

Central Texas Beekeepers Association

Michael Kelling - (979) 277-0411

CentralTexasBeekeepers@gmail.com

www.centraltexasbeekeepers.org

1997 Tonckawa Hills Ln - Brenham, TX 77833

Meetings: Monthly on the 4th Thursday

(except November and December) at the

Washington County Fairgrounds

Brenham @ 7 pm

Coastal Bend Beekeepers Association

Dennis Gray (361) 877-2440

CoastalBendBeekeepers@gmail.com

Meetings: First Thursday of each month at 6:30pm;

City of Corpus Garden Senior Center

5325 Greely Dr., Corpus Christi, TX 78412

Collin County Hobby Beekeepers Assn.

John J. Talbert - (214) 532-9241

john@sabinecreekhoney.com

P O Box 6 - Josephine, TX 75164

www.ccbba.org

Meetings: 2nd Monday of each month;

Collin College Conference Center, (Central Park Campus)

2200 West University Drive, McKinney, TX 75071 @ 6:30 pm

Concho Valley Beekeepers Association

Mel Williams - (325) 668-5080

honeybeemanwilliams@gmail.com

Meetings: 3rd Tuesday of each month Jan-Nov

Texas A&M Research and Extension Center

7887 US Hwy 87 N, San Angelo @ 7:30 pm

Deep East Texas Beekeepers Association

Ellen Reeder - (337) 499-6826

ellenswartz@sbcglobal.net

1299 Farm Road 3017, San Augustine, TX 75972

Meetings: 1st Tuesday of each month

San Augustine Chamber of Commerce Building, 611 West Columbia Street,

San Augustine, TX 75972 @ 6 pm

Denton County Beekeepers Association

Christina Beck - (940) 765-6845

christinadbeck@gmail.com

2217 Denison, Denton, TX 76201

Meetings: 1st Wednesday of each month at 6:30pm

Cross Church, 1100 Dallas Drive #106, Denton, TX 76205

Dino-Beekeepers Association

Chip Hough (817) 559-0564

dino-beeclub@hotmail.com

www.dinobee.com

Meetings: 2nd Tuesday of month

Glen Rose Citizens Center

209 SW Barnard St, Glen Rose, TX 76043

East Texas Beekeepers Association

Richard Counts - (903) 566-6789

dick.counts4450@gmail.com

16239 Audrey Lane - Arp, TX 75750

www.etba.info

Meetings: 1st Thursday of each month;

Whitehouse United Methodist Church,

405 West Main (Hwy 346), Whitehouse @ 6:45 pm

Erath County Beekeepers Association

James K Gray - (254) 485-3238

grayjamesk@jkgray.com

675 Turkey Ridge Road, Stephenville, TX 76401

Meetings:

Fayette County Beekeepers Association

Ron Chess - (979) 525-9254

ragsdale@industryinet.com

Meetings: First Saturday of the month, Feb, April,

June, August, October and December at 5:00pm

Fayette County Agriculture Building

240 Svoboda Lane, La Grange, TX 78945

Fort Bend Beekeepers Association

1402 Band Road, Rosenberg, TX 77471

(281) 633-7029 (during office hours)

Jeff McMullan - Secretary - Treasurer

(281) 980-2363 (home): (281) 615-5346 (cell)

jeffmcmullan@comcast.net

Meetings: 2nd Tuesday of each month (except

December) in the Fort Bend County

Bud O'Shieles Community Center

1330 Band Road, Rosenberg, TX 77471

Fredericksburg Beekeepers Association

Joe Bader - (830) 537-4040

joebees@gmail.com

724 Cypress Bend Dr., Boerne, TX 78006

Meetings: Third Thursday of even number months (excl. Dec)

Gillespie County AgriLife Extension Office

95 Frederick Rd., Fredericksburg, TX 78624 @ 6:30 pm

Harris County Beekeepers Association

Gary Parks (713) 906-1805

gparks@geparkslaw.com

www.harriscountybeekeepers.org

Meetings: 4th Tuesday of each month
Golden Acres Center - 5001 Oak Avenue
Pasadena @ 7 pm

Heart of Texas Beekeepers Association

Gary Bowles - (254) 214-4514

gbowles@peoplepc.com

Meetings: 4th Tuesday of each month
(except December) at Vegas Buffet,
505 N. Valley Mills Dr., Waco, TX 76710
Dinner at 6 pm, Meeting at 7 pm

Hill County Beekeepers Association

Art Wharton (254) 221-5325

obyougotit@aim.com

Meetings: 3rd Tuesday of the month
at Hill County Court House Annex
126 S. Covington Street, Hillsboro, TX 76645
Social at 6pm, Meeting at 7pm

Houston Beekeepers Association

Hank Hilliard - (713) 828-7247

bank.hilliard@houstonbees.dub

3822 Piping Rock Lane, Houston, TX 77027

www.houstonbeekeepers.org

Meetings: 3rd Tuesday of each month; Bayland
Community Center, 6400 Bissonnet St.
Houston @ 7:30 pm

Houston Natural Beekeepers Association

Dean Cook

houstonnaturalbeekeepers@gmail.com

Meetings: 1702 Rothwell, Bldg. C, Houston, TX 77020
Second Saturday of the month, 10am - Noon

Johnson County Beekeepers Association

Scott Crowe, Don Russell

boatshop6@yahoo.com - jcbeekeepers.org

Meetings: Cattle Guard Cafe, 901 S Parkway Dr.
Alvarado, TX. 2nd Tuesday of each month @ 6:30 pm

Lamar County Beekeepers Association

Scott Brinker - (501) 307-5111

lamarcobra@gmail.com

Meetings: 1st Thursday of the month: Lamar County Fairgrounds
570 E Center Street, Paris, TX 75460 @ 6pm
(First Mtg April 7th 2016)

Liberty County Beekeepers Association

Cameron Crane - (409) 658-3800

info@libertycountybeekeepers.org

2300 Beveledere Dr., Baytown, TX 77520

www.libertycountybeekeepers.org

Meetings: 1st Tuesday of each month at 7pm
Business meeting at 6:30pm
Liberty Agrilife Extension Office
501 Palmer Avenue, Liberty TX

Marshall Beekeeping Association

Beth Derr - (936) 591-2399

marshallbeekeeping@gmail.com

210 Meadowlark Dr. Jefferson, TX 75657

Meetings: 2nd Thursday of each month at 5:30 pm
Cumberland Presbyterian Church
501 Indian Springs Drive
Marshall, TX 75670

Metro Beekeepers Association

Keegan Olsen, President - (682) 225-0862

keeganolson@yahoo.com

www.metrobeekeepers.net

Meetings: 2nd Monday of each month; Southside Preservation Hall,
1519 Lipscomb St., Fort Worth TX 76104

Montgomery County Beekeepers Assn.

Doug Stanley

mocobees@gmail.com

www.mocobees.com

Meetings: 3rd Monday of each month at
Montgomery County Extension Office, 9020 Airport Road,
Conroe TX @ 7 pm (NewBee at 6:30pm)

Northeast Texas Beekeepers Association

Jim Burt - (469) 371-4542

burt.b@sbcglobal.net

netbacantontexas@outlook.com

14158 Rainbow Dr., Forney, TX 75126

Meetings: 2nd Tuesday of each month; @ 6:30 pm
The Farm Bureau Building,
281 Hwy 243, Canton, TX 75103

Pineywoods Beekeepers Association

Terry McFall - (409) 384-3626

tdmcfall@hotmail.com

1700 FM 252, Jasper, TX 75951

Meetings: 2nd Thursday of each month
Chamber of Commerce Building,
1615 S Chestnut, Lufkin @ 7:00 pm

Red River Valley Beekeepers Assn.

Kerry Roach (940) 249-0947

kerrysbees43@gmail.com

PO Box 8445, Wichita Falls, TX 76301

Meetings: 3rd Tuesday of each month
(except December) Bolin Science Hall, Room 209
Midwestern St. University
Wichita Falls @ 7 pm

Travis County Beekeepers Assn.

Tanya Phillips - (512) 560-3732

info@traviscountybeekeepers.org

9874 Wier Loop Circle, Austin, TX 78736

www.traviscountybeekeepers.org

Meetings: First Monday of the month at 7pm
Zilker Botanical Garden, 2220 Barton Springs Rd., Austin, TX 78704

Trinity Valley Beekeepers Association

Bob Richie - (214) 793-1516

rgrichie@sbcglobal.net

8266 Barbaree Blvd., Dallas, TX 75228

www.tvbees.org

Meetings: 2nd Tuesday of each month
(except August), Continuing Education Center,
C.C. Young Facility, 4847 West Lawther Dr.,
Dallas, TX 75214 @ 7 - 9 pm

Tyler County Bee Club

Scott Martin - (409) 283-4507

sbskot@gmail.com

308 Miles Loop, Colmesneil, TX 75938

Meetings: 4th Tuesday of each month at 6pm
Nutrition Center, 201 Veterans Way, Woodville, TX 75979

Walker County Area Beekeepers Assn.

Mark Short - (281) 387-8124

msbort5150@yahoo.com

PO Box 9535, Huntsville, TX 77340

Meetings: Last Thursday of each month
at Walker Education Center, 1402 19th St.,
Huntsville, TX 77320 @ 7 pm

Williamson County Area Beekeepers Assn.

Jimmie Oakley - (512) 388-3630

jimmie.oakley@gmail.com - www.wcaba.org

425 Sapphire Lane, Jarrell, TX 76537

Meetings: 4th Thursday of each month
(except December) 1st United Methodist Church -
McKinney Ministry Center, 410 E University Ave.
Georgetown, TX 78626 @ 7 pm

Wood County Beekeepers Association

Mary M Smith - (903) 342-3438

woodcountybeekeepers@gmail.com

720 South Walnut St., Winnsboro, TX 75494

Meetings: First Tuesday of every month
BTH Bank, 210 South Main St., Winnsboro, TX 75494
at 6:30 pm

Texas Beekeepers Association

Chris Doggett, Editor
400 County Road 440
Thrall, TX 76578-8701
Phone: (512) 914-2794
ckdoggett@gmail.com

Return Service Requested

PRESORTED STANDARD
U.S. POSTAGE PAID
Webster, TX
Permit No. 184

TBA Officers-2016



President

Chris Moore
moorehoneyfarm@gmail.com
9767 Bevil Blvd.
Kountze, TX 77625
(713) 724-7110

Vice President

Mark Hedley
mark@spiralhornapiary.com
8247 FM 502
Rochelle, TX 76872
(325) 463-5319

Past President

Blake Shook
blake@desertcreekhoney.com
575 County Road 5010
Blue Ridge, TX 75424
(214) 886-6899

Executive Secretary

John J. Talbert
john@sabinecreekhoney.com
P.O. Box 6
Josephine, TX 75164
(214) 532-9241

Treasurer

Holly Medina
tbtasure@gmail.com
PO Box 2026
Cedar Park, TX 78630
(512) 921-1521

Publications Director

Chris Doggett
ckdoggett@gmail.com
400 County Road 440
Thrall, TX 76578
(512) 914-2794

Membership Coordinator

Shirley Doggett sdoggett@mindspring.com
400 County Road 440, Thrall, TX 76578
(512) 924-5051

Communications Coordinators

Chari & James Elam jcelamservices@gmail.com
11900 Seven Coves Rd., Willis, TX 77378
(936) 520-4669



Dreyfus PRINTING/110 W Sealy/Alvin, TX 77511/email: info@dreyfusprinting.com/Phone: 281/331-3381 Fax: 281/331-0466