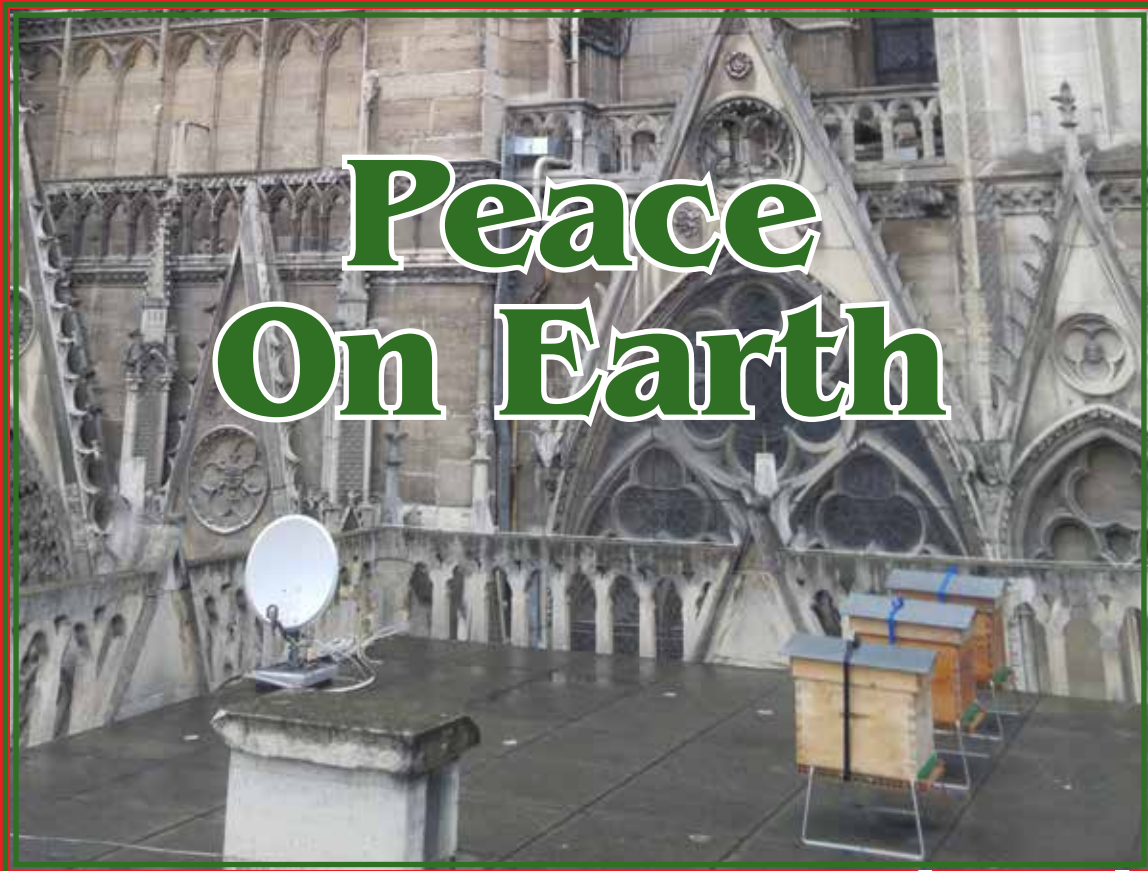




Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

ISSUE 64: DECEMBER 2015



IN THIS ISSUE

From the Queen's Court <i>by Melanie Kirby</i>	2
ABeeCs <i>by Liz Walsh</i>	5
Just the FAQs <i>by Phill Remick</i>	7
XYZs <i>by Dennis Brown</i>	9
Bee Thinking About: FreeTheBeesZine.com & Conferences	12
Bee Science: Meet the Researcher, Dr. Zachary Huang	21
Bee Health: Rotational Grazing, Part I <i>by Melanie Kirby</i>	23
Bee Arts: Ursula Westervelt, Bee Progressive, Everyday Artifact	27
Upcoming Events	30

From the Queen's Court

by Melanie Kirby

This year has zipped by so quickly. I can hardly believe that another bee season is fastly approaching. I've spent this past year traveling to and fro visiting beekeepers in California, British Columbia, Nicaragua, North Carolina, Colorado, France and Florida. Phew...and in between running my own small bee breeding farm with a dedicated partner who likes to remain anonymous (though some already are familiar with him as I call him, "our farm's wizard behind the curtains—Mark"). Who knew that after a couple of decades of perseverance, my "story" of fellowship through beekeeping and queen breeding would find interested ears in all parts of the globe. I am so very grateful for the opportunities I have had and for the experiences to come. My humble part in this whole Beekeeping Renaissance as I like to call it, is to revere our winged angels and support conscientious stewardship...and no doubt, I am still learning.



I have a lot of stories to pass along, like how I got stung by a French assimilated *Buckfast* and *Apis Mellifera Mellifera* bee and actually roasted chestnuts in Normandy while drinking cider. And how I met Gunter Haulk and Ross Conrad at the recent Florida State Beekeepers Association convention on Amelia Island in Jacksonville. But...I'll save these and other fun stories for when we get real cold and need a good read curled up next to our smokers day dreaming of catching that big swarm in the spring.

Instead, I've written a little ditty to celebrate this time of year. Whether you are lighting your Christmas tree or Menorah, let us remember that some of life's greatest gifts come in small, sweet, fuzzy and buzzy packages.



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

Editor

Melanie Kirby
Editor@KelleyBees.com

Design & Layout

Jon Weaver, Johnny4Eyes.com

Website & Ecommerce

KelleyBees.com

Address

807 W. Main St.
P.O. Box 240
Clarkson, KY 42726

Phone

270-242-2012
800-233-2899

© 2015 Kelley Beekeeping
All rights reserved.

CALL FOR PHOTOS

Want to see your bee-related photo on the cover of this newsletter? Send photos to editor@kelleybees.com

Queen's Court *continued*

Dearth be Upon Us...

'Tis the time that fields lay fallow
Snow ablustering, whistling hallows

And yet inside, a cozy atmosphere
Smelling of sweetness and family cheer
Vibrations move the cluster around
The search of cured nectars soon found

And with each sip, a cycle is fulfilled
Of the Earth blossom's essence instilled

In one tiny drop of soul filled sweet
It spurs the metamorphosis complete

And then renewed, the grass does push
Forth from the ground disturbing bush
And the snow turns to dew and the
Dew turns to mist
And the humble honeybee begins her list

May we enjoy the year's end and patiently look forward to next season's manifestations.
Give thanks and rejoice. And by all means, responsibly indulge in libations....

Thank you Bees—for providing so much to us—may we follow in your footsteps and learn to put our individual endeavors into a collective progression of unity and prosperity for all.

Peace On Earth! Melanie Kirby

Cover Shot: Editor Melanie Kirby took this photo on her last day in France after visiting ANERCEA, the French Queenbreeder's Association in Normandy. She visited Beeopic's roof-top hives at Notre Dame Cathedral in Paris. The bells were tolling and it was quite a sensation to hear the bees quietly buzzing along to the vibrations of the bells.



Carving at L'Hermitage des Abeilles honey and cider farm in Normandy, France. Photo by M. Kirby

Melanie serves as the editor of KB newsletter. She is humbled to have learned from bees and their keepers in North America, South America, the Caribbean, Europe, the Mediterranean, and the Pacific Islands. She is excited to see what her next 20 years of beekeeping will inspire. She can be reached at Editor@KelleyBees.com



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924



Now Available!

Package Bees

Description	Price
Package with Italian Queen.....	\$110.00
Package with Marked Italian Queen	\$113.00
Package with Russian Queen	\$114.00
Package with Marked Russian Queen.....	\$117.00



Package Specifics

- Packages available with Italian or Russian Hybrid Queens
- Marked or Unmarked Queens Available
- All Kelley Packages Provided with a Health Certificate
- Kelley's will insure all package bees shipped in zone 1-4
- Kelley's Guarantees that the Queen is Fertile
- Payment of Package Bees is Due at Time of Ordering

Why should I order early?

- Order early to ensure your desired receiving date.
- Only a limited number are available throughout the season.
- All sold on a first-come, first-served basis.

Our package bees are shipped ground U.S.P.S., priority mail only. Insurance required on all package bees in zones 1-4. Insurance not available in zones 5 or greater.

1-800-233-2899



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

www.kelleybees.com

If you have a question you would like to share, email it to Editor@KelleyBees.com

A•Bee•Cs

Beginning Beekeeping

by Liz Walsh



Mentoring as a commitment: Do you have what it takes?

I was recently at an outreach event where I met a first year beekeeper. They proudly introduced me to their "mentor" (who seemed a little surprised to be introduced as a mentor) and we began conversing about this year's season. I was startled to realize, part way through the conversation, that the "mentor" was a second year beekeeper. This made me think about mentoring in beekeeping and qualifications that it is good for mentors and mentees to have. I am curious about your opinion on mentors and would be curious to hear what you think or what your experiences have been.

Beekeeping seems to be the new fad. I only started a measly 9 years ago, but I remember how people would look at me like I was an absolute nut when I told them that I was a beekeeper. Now, there are times when I hide that I'm a beekeeper. I don't wear much bee gear in public and I don't generally advertise my affiliations with the beekeeping world for fear that I'll be accosted for an hour or so in the grocery as ladies talk at me about how their daughter's boyfriend's brother (or some other obscure acquaintance) is now starting beekeeping. While I love the enthusiasm, at some point it becomes annoying when such conversations inevitably end with "and how can they contact you?"

Mentoring is one of the most rewarding parts of beekeeping for me. I enjoy helping others have lightbulb moments where their eyes light up and all of a sudden everything makes sense. That said, an important part of this relationship is that it is consensual. I think many beekeepers have had a mentee that they didn't know they had, as perhaps the "mentor" I recently met didn't. Asking if someone is willing to be your mentor is important for new beekeepers to do and it seems to make a mentor-mentee relationship better than if a mentee assumes a beekeeper would be honored to help them. Additionally, I think that it's important for mentors to be willing to actually spend time with their mentee going through colonies. This is a commitment which requires no small amount of time. If the "mentor" is only the person you have emergency phone calls with, then the mentee isn't really fully benefiting from a senior beekeeper's expertise. I still learn new things when I go through colonies with other beekeepers and I learned the most doing hive inspections with others when I first began beekeeping. If one is going to put the time and effort into a mentor-mentee relationship to make it worthwhile, then it's important for all parties to be willing to make a commitment to do that.

Another thing I think is important in mentor/mentee relationships is that the mentor actually has a large body of knowledge to offer. At the same meeting where I met the first and second year beekeepers, I was excited to see the enthusiasm everyone had for mentoring others. I was told

ABeeCs *continued*

that it was a new club so that people interested in beekeeping could find mentors at meetings. I was therefore shocked to find that the average "age" of the beekeepers in the group was about two years old. I don't know about you, but I think the height of my beekeeping confidence was in my second year. Coincidentally, this was also when I probably knew the least about beekeeping. It takes a long time to learn the weather patterns and nectar flows of an area, and those are things I think one needs to know if they are going to be a good mentor. Unfortunately, you can really only learn those things after you have been beekeeping in an area for some time (in the scale of years, not months). As a new Texan beekeeper, I don't know the weather patterns and nectar flows well enough to mentor someone in this environment, so I haven't taken mentees here. I hope that I will eventually know the weather patterns well enough that I could be confident helping someone learn beekeeping in this area.

The flip side of this coin is that no one knows much during their first year of beekeeping. I think most people know a little bit more their second year. Perhaps knowing anything is a good thing if the person being mentored knows nothing. That said, is there ever a case of "the blind leading the blind?" Is there such a thing as a second year beekeeping mentor?

As a community, much of our knowledge is hands on. This requires that someone actually passes on the knowledge. Books are a fabulous place to start beekeeping, but I think that learning what an angry buzz sounds like and being able to recognize alarm pheromone are learned most efficiently from other beekeepers. As such, it is important for us to mentor others if we are able to commit to spending the time and patience doing so--and if we have actual expertise to offer. Is there a year minimum on getting "expertise"? Probably not, but I do feel strongly that seeing a variety of different weather patterns, nectar flows, etc. is important and that generally takes years to experience. What do you think?

Liz Walsh is a graduate student at the Rangel Honey Bee Lab, Department of Entomology, Texas A&M University. She can be reached at walsh@tamu.edu



Just the FAQs

Questions & Answers

by Phill Remick

You Say You Want A Res-o-lu-tion, Well You Know...

As 2015 draws to a close, we reflect on times past, with an eye toward the future, including thoughts related to improving our beekeeping skills. Many of us make New Year's resolutions.

Since the majority of inquiries are generated by new keepers of bees, allow me to make a few points. Many imagine the art of beekeeping as merely a matter of merging equipment and bees together - fervently anticipating the marvelous, magical synergy inside the hive. Yup, just "set 'em and forget 'em." However, understand there is a process, like it or not, that must be honored. Just ask the bees.

What do I mean? In specific words - it's time to learn baby, really learn! Quit thinking you've got it all under control, while looking for short cuts to successful beekeeping! There are no shortcuts and there is a major learning curve on the path to true competence as a beekeeper.

Resolve to locate someone with genuine, tried and true experience to mentor you! A beekeeper credited with more (much more) than a few summers of backyard beekeeping is well worth seeking out. Additionally, consume ongoing and in-depth beekeeping classes locally or online. Forget thinking you can wing it and have your bees survive with little intervention. A large segment of new bee folk haven't a clue in many situations, in fact, it's downright frightening. If you saw the emails I get you'd be shocked. Time after time I hear from those who boast about their success in the first go round. For the record, the first season is almost always a breeze. It's all the years that follow which create the awesome challenge of keeping honey bees alive and well. You do want more than one year with honey bees, don't you?

Resolve to problem solve: take notice of what is happening around you in the apiary. Look, listen and PAY SERIOUS ATTENTION. Don't arrive, crack open a hive and commence babbling about the magnificent vibes honey bees project or how you feel 'at one-with-the-universe' when peering down on them, PLEASE! You are wasting time and annoying the bees (and me!) Get on with it!

Resolve to have a practical procedure in mind before entering a hive. For example; WHY are you there? Scan the landscape. Is the weather/temperature conducive for a hive inspection? Spot anything out of the ordinary? Is there any robbing going on? Are there signs of disturbance or damage to the hives? How about evidence of predators, like ants, mice or skunks? Is the sound of the apiary normal or frenzied? Is there a honey flow on, does foraging behavior appear normal? Are the bees bouncing off your veil, warning you to keep your distance? Every one of these questions needs to be considered and answered every time you enter your bee yard.

Resolve to resist proclaiming you have no Varroa mites and being proud that your hives are 'treatment -free' - because it is highly unlikely that your hives do not have mites. Many don't grasp



the seriousness of mites. Varroa mites can be transferred to other bee outposts easily and are sources for serious disease, often resulting in the demise of the colony. Bypass the 'treatment-free' bragging. Most bee hives have mites, the sooner you learn the signs and treatment protocols the better.

Resolve to seriously contemplate treating your colonies properly so they are less likely to become vectors of contamination to other colonies in the area when robbing occurs. If you use a product, always read and follow label directions, exactly as stated! With some compounds, temperature fluctuations inside the hive can create dramatic consequences.

Resolve to fully comprehend the 'mite load' of each of your colonies. Everyone understands how to determine their colonies 'mite load' right? Right! What load? Precisely!

Resolve to check out various treatment options - organic and otherwise - available to those serious about safeguarding their bees as well as their neighbors. You may ask, "Am I my brothers (bee) keeper? " Well, it might be an opportune time to establish better communication with keepers in your immediate area. Harp with dream sequence segue to classic shot of Mr. Rogers on his front porch singing, "It's a beautiful day in this neighborhood, a beautiful day for a neighbor, would you bee mine?" Competent beekeepers consider their beehives effect on the entire neighborhood at all times of the year.

Resolve to remember; ineptitude can affect everyone's honey bees! Your mite-ridden bees can infect others which have been treated and cared for.

Resolve to become educated about pesticides, especially those in the systemic class of neonicotinoids. How many of your neighbors use glyphosate (Roundup) to eradicate one of the honey bee's favorite spring nectar sources - dandelions, among other flowers? Connect the dots with neighbors; explain the toxic pesticide burden they may be heaping on the area.

Resolve to introduce yourself to local lawmakers and spread awareness of the ongoing usage of pesticides in parks, on medians, bike paths, open spaces, around parking lots, school yards, etc. Suggest alternative methods of weed and pest control, including soaps and garden implements - OR letting weeds grow naturally and just keeping them trimmed down.

Resolve to not remove as much honey from your hives as you did in 2015. Consider leaving more natural stores for the bees. How about feeding them a viable pollen substitute? Of utmost importance, realize you must verify all colonies do in fact have adequate food well before winter descends.

Resolve to be a superior beekeeper and not a 'bee-haver' in 2016.

Thank you and good night.

Phill Remick is a former commercial beekeeper and seasonal apiary inspector who teaches beekeeping, offers year round apiary consulting and sells supplies near Edgewood, NM. Contact: Phill@NewBeeRescue.com

X•Y•Zs

Advanced Beekeeping

by Dennis Brown



Hi Dennis,

I've got a quick question for you. My uncle who is getting out of beekeeping for health reasons wants to give me his three hives. He lives about two hours away. He claims his three hives are in two brood boxes each. Now, my question is....What would be the best way to move them? I have thought about robbing them first and then moving them, to make it much lighter. But then I got to thinking that the top box is probably full of brood and I wouldn't be able to rob them. So, would it be acceptable to separate each hive and reassemble them once I got them home? I've never had to move large hives like this before. I know they will be heavy and I will be on my own with no help. Any advice would be greatly appreciated.

Darrell Johnson

Hello Darrell,

There are a couple of things you should think about. I always let the bees have whatever they can store in the first two brood boxes. If they produce anything above the two brood boxes, I will call that surplus and extract it for myself. First, you should not rob any honey from the two lower brood boxes. The bees will need these stores during the year. If you do rob it, you will have to feed the bee's sugar water for them to winter on which is not as healthy for the bees, plus sugar is expensive.

Secondly, you need to pay attention to any bee diseases in these hives. You certainly don't want to bring any diseases into your main bee yard. Find a new spot a couple miles away from your main yard to locate them for a while before you bring them home. Have an extra pair of gloves and an extra hive tool to use specifically in the new yard in case you do find a disease. This way you don't spread it to the main yard by using the same tools.

You will have to break each hive down and reassemble them together intact on the truck. Put down a strap first, and then place the bottom board on top of the strap, then the two brood boxes (in the same order they were.) Now, strap the hive together. Perform this system on each hive until they are all loaded. If you have a screen bottom board, you can use a solid piece of wood to block the entrance. If you are using a solid bottom board, you will need to provide a screen entrance for the bees to have good ventilation.

Maybe when you get to the new location, you can find someone to help you unload. That way, you can lift each hive intact and place them in their new location. If not, you will have to perform the same system as before to get them off the truck and into place.

Response: Is this an OK time of year to move them? We moved our two hives from Houston to Bastrop in July when very hot. We lost one of our hives during the move.

The only time you should not move bees is in the winter for areas with four seasons. You don't want to disturb the winter cluster. As long as you provide good ventilation, you can move your bees during the rest of the year. It is also recommended for longer journeys to also sprinkle them with cool water to help them with evaporative cooling effect if it is hot weather.

Enjoy your bees!
Dennis Brown

Dennis Brown is the author of "Beekeeping: A Personal Journey" and "Beekeeping: Questions and Answers." Contact Dennis at www.lonestarfarms.net.



KelleyBees.com
SHOP ONLINE

LIKE US AT
**Kelley
Beekeeping**



WATCH
**YouTube.com/
KelleyBees**

How to **SHARE** the Kelley Beekeeping Newsletter on Facebook



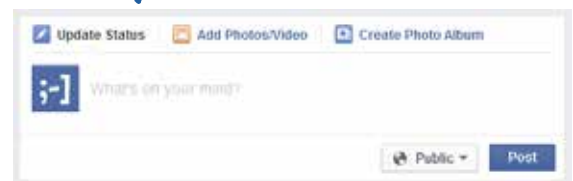
1

Copy the URL from the address field.
Keyboard Shortcut:
Press Control + C to copy.



2

Paste the URL into your status update.
Keyboard Shortcut:
Press Control + V to paste.



Press Post and share the newsletter
with your beekeeping friends.
Thanks for sharing!

3



300 Hives or More?



We have a SPECIAL just for you.
Call us at 270-242-2019 ext. 213
e-mail aconstant@kelleybees.com

Bee Thinking About

FreeTheBeesZine.com

by Melanie Kirby and K. Kaye

Year before last, Kristi Kaye, a youthful twenty-something beekeeper raised in upstate New York, came to intern at Zia Queenbees Farm & Field Institute and assisted with organizing 11 lectures by renowned bee scholars around the state of New Mexico. Kaat (as she fondly also goes by) and I first met year before last in the Caribbean jungles of Jamaica. We became friends quickly as Kaat shared with me her interest in beekeeping and how she started as a twelve-year-old grappling with hearing loss and assimilation. She was interning for Yerba Buena Farms and learning how to farm and keep bees in the tropics, recently ravaged then by Hurricane Sandy.

A few months after meeting her, she contacted me and asked if she could come out to assist at our farm. Having met her in person, I felt comfortable inviting her to come stay at our farm on a sky island in the southern Rocky Mountains of northern New Mexico. Her visit was timely as I was trying to stay on target of objectives for fulfilling a local agriculture grant. We were to host Dr. Thomas Seeley of Cornell—author of [Honeybee Democracy, sold on KelleyBees.com](#)—and also Dr. Juliana Posada-Rangel of Texas A&M. She is the Director of the [Bee Lab](#) in College Station.



Kaat and I talked a lot about the passions of beekeeping and of the quest for sustainable management potentials and applications. Her perspective was quite unique for me as I recalled my “Coming of Age Years” of working for various beekeepers and operations on a mission to gain experience and a level of comfortability working with such marvelous creatures. I was also stunned and in awe seeing her interact with the loud world of society as a deaf adolescent. Her feelings for beekeeping seem much more nuanced as her other senses seemingly invite her to discover and observe a clearer experience.

In the 6 weeks that Kaat helped me to produce the lectures and host scientists and collect samples for research analysis AND to help document and compose our grant report to the state agriculture department, she talked about a brewing idea that was buzzing around in her brain...a phrase, a motto, a declaration that she wanted to share with those interested near and far. She is an activist, one who walks as she talks. She needed a platform. Since she is hearing impaired, she does a lot of

Bee Thinking About *continued*

reading...and this buzzing thought began to gather momentum within her – manifesting into the FreeTheBeesZine.com, which will be a collection of writings from varied perspective bee aficionados.

Kaat will be starting a KickStarter campaign soon...to follow her efforts and to contribute to this new generation beekeeper's efforts to share positive and constructive information, sharing stories in solidarity—visit: <http://freethebeeszine.com>!

There are three sections to each zine:

Head – exploring bee stewardship (technique + philosophy) in harmony with mother nature,

Hands – recipes, crafts, and projects to create yourself, and

Heart – the expression of personal experiences as a bee guardian.

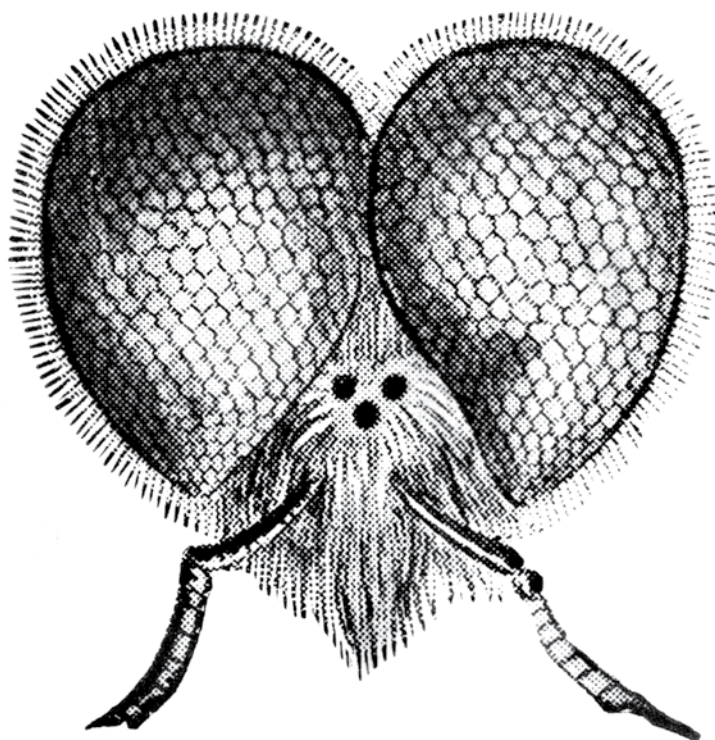
2 A5 sized pages each, roughly 400-500 words per contributor.

If you know anyone who may be interested in this project and may want to contribute...do send them the link (<http://freethebeeszine.com>)!

Let me know if you have any more questions!

Thank you, thank you!

Kaat, rootfluxx@gmail.com



LOUISIANA BEEKEEPERS ASSOCIATION

54th ANNUAL CONVENTION

DECEMBER 4th and 5th, 2015

The Louisiana Beekeepers Association (LBA) will hold their 54th annual convention on Friday, December 4th and Saturday, December 5th at the Hilton Garden Inn; 400 Mane Street, West Monroe, Louisiana 71292. A block of rooms will be held for LBA guests at a rate of \$109.00 for a standard-double room (two queen beds) per night. Please make your reservations by calling 318.398.0653. Remember to mention the Louisiana Beekeepers Association to get the special rate.

Please join us for the latest research information from the USDA/ARS Honey Bee Breeding, Genetics & Physiology Laboratory. Also, some of the speakers are Chris Hiatt, Executive Board Member of American Honey Producers, Randy Oliver, Beekeeping through the Eyes of a Biologist, Dr. David Tarpy, Professor of Entomology and the Extension Apiculturist at North Carolina State University. There will be something for everyone from the small scale beekeeper to the lifetime beekeeper as well as the commercial beekeeper, so please join us in West Monroe.

A registration fee of \$20.00 per person or \$30.00 per family is required if pre-registered by November 13. You may register online at the LBA website: labeekeepers.org by using your credit card or PayPal or you may mail in the registration form that is located on the labeekeepers.org website and your check payable to the Louisiana Beekeepers Association to: David Ferguson, P.O. Box 716, Brusly, LA 70719. There will be a registration fee of \$30.00 per person and \$40.00 per family for those that register after the November 13 pre-registration cut-off date or at the convention.

**Please contact Joe Sanroma at 318.308.5000
or Amy Weeks 318.325.6614 for additional information.**

Date: Jan. 16th 2016

What: Austin 5th Annual Beekeeping Seminar

Who: Sponsored by the Austin Area Beekeepers Assoc.

Where: J.J. Pickle Research Campus

10100 Burnet Road, Austin, TX 78758

Cost: \$40 pre-registration

To Register: <http://aabaseminar2016.eventbrite.com>

Why: The mission of this daylong seminar is to educate people of all experience levels in sustainable bee husbandry and to provide funding for the Texas A&M Honey Bee Lab.

Description: This is a daylong seminar offering 4 different educational presentations running concurrently in each time slot throughout the day. This will provide many beginning and advanced subjects to choose from. A separate beginner's track has been formatted covering a variety of startup topics for soon to be or very new beekeepers.

Afternoon sessions will include many different presentations including:

- Honey Bee Management 1 and 2
- Honey Bee Biology and Behavior
- Top Bar Management 1 and 2
- Varroa Management
- Brood Disease Control
- Swarm Capture Techniques
- Raising Queens
- Learn Honey Extraction Techniques
- Beneficial Bee Flowers
- Queen Finding and Requeening Techniques
- The Latest in the Texas Bee Lab Research
- Colony Supersedure and Management
- Keeping Bees in an Africanized Zone
- Nutrition Management
- Spring Management
- Cut Outs
- Honey Extraction Techniques



Presenters include:

- Professor Juliana Rangel-Posada, Dept. of Entomology Texas A&M.
- Mark Dykes, Chief Texas Apiary Inspector.
- Mark Hedley, Commercial beekeeper and owner of Spiral Horn Apiary.
- Chris Doggett, President, Williamson County Area Beekeepers Assoc.
- Tanya Phillips, President of the Travis County Beekeepers Assoc.
- Dean Cook, Top Bar hive management advocate
- Karl Acuri, Austin Area Beekeepers Assoc. (Co-organizer) and natural beekeeper.
- Mary Reed, Texas Apiary Inspector
- Cameron Crane, Area Director Texas Beekeepers Association
- Lily Rosenman, Austin Area Beekeepers Assoc. (Co-organizer) & natural beekeeper.
- Becky Bender, TX Master Naturalist
- Brandon Fehrenkamp, Natural beekeeper advocate and owner of Austin Bees
- Lance Wilson, Cert. Master Beekeeper GMBP

**For more info and to register for this event, go to
<http://aabaseminar2016.eventbrite.com>**

**For additional information you can email Lance Wilson
lance@beekeepinghelp.com.**

This organization is non-profit and all proceeds of this event will be used to promote sustainable beekeeping practices and provide support to our much appreciated Texas A&M Honey Bee Lab. This should be a lot of fun, everyone please come out and see us.



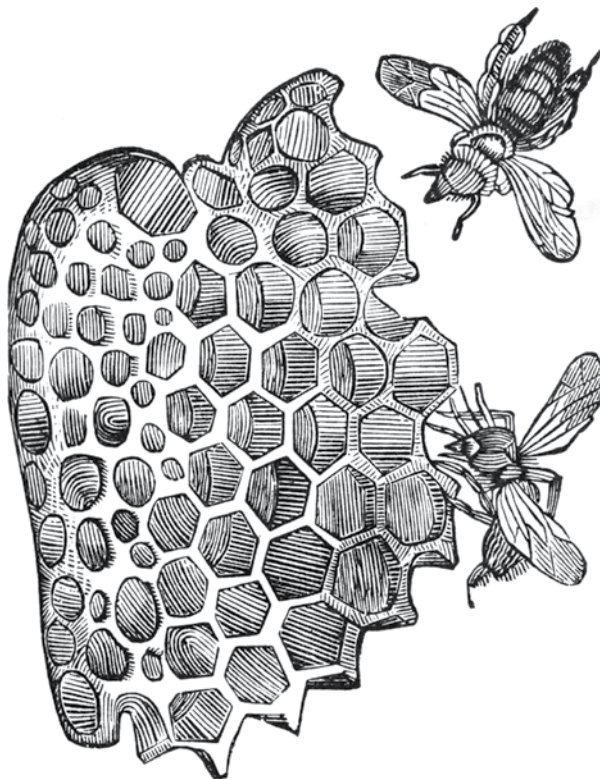
American Honey
Producers Association

www.AHPAnet.com



Join Us!
47th Annual
Convention
&
Trade Show
January 5-9,
2016

Albuquerque,
New Mexico
Embassy Suites





January 5-9, 2016



Sawgrass Marriott Golf Resort & Spa



Ponte Vedra Beach (Jacksonville), FL



Join fellow beekeepers in Ponte Vedra Beach (Jacksonville, FL) for the 2016 American Beekeeping Federation (ABF) Conference & Tradeshow featuring:

- Presentations and workshops for all levels of beekeeping led by industry experts
- Keynote presentations by top researchers in the field
- A Tradeshow highlighting products and services in the beekeeping industry
- Opportunities to network with beekeepers of all levels, vendors and industry experts
- 2016 Honey Queen Coronation, Honey Show & Auction and more!



Register today for the conference at www.abfconference.com to secure the lowest registration rate and to take advantage of the special hotel rate of \$125 (plus tax) at the Sawgrass Marriott Golf Resort & Spa.



SAVE UP TO \$100 Register by October 14!
For additional information about the conference, please call 404.760.2875 or visit abfconference.com.



American Beekeeping Federation

PALM TREES & HEALTHY BEES

Get ready for an exciting week of education & networking!

The 2016 American Beekeeping Federation (ABF) Conference & Tradeshow is just three short months away. We've got exciting things planned for the conference that we can't wait to share with you.

General Sessions on Wednesday and Friday will feature presentations such as:

- o Keynote Presentation by Marla Spivak
- o Updates from the EPA and USDA
- o National Honey Board Promotions and Research Update
- o Project Apis m Partnership Helping Honey Bees
- o Bee Informed Partnership Update
- o Updates from all USDA-ARS Bee Labs

Shared Interest Group Meetings (SIGs) on Thursday, filled with educational for the following SIG groups:

- o Producer/Packer SIG
- o Small Scale/Sideliner SIG
- o Package Bee and Queen Breeder SIG
- o Commercial SIG

Track Sessions on Thursday for the Beginning, Serious Sideliner and Commercial beekeepers including the following presentations:

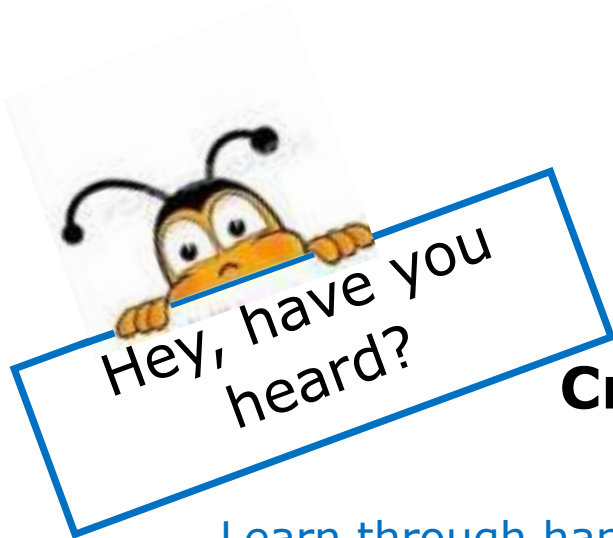
- o Bee Understanding Project by Emily Olsen-Harbach
- o Pollen Collection by John Speckman
- o Electrical Qualities of Plants by Dr. Jody Johnson
- o Summer Splits: Timing and Technique for Mite Load Reduction by Doug Vinson
- o Assessing Risk Factors Associated with Honey Bee Colony Survival in Canada by Dr. Steve Pernal
- o Regulation of Macronutrient Intake by Adult Worker by Dr. Geraldine Wright

Optional activities throughout the conference (requiring an additional registration fee) include:

- o Auxiliary Lunch/Meeting on Thursday, January 7
- o Social Night on Thursday, January 7: Join us for a night at the Jacksonville Zoo for dinner, exploration and maybe a bit of dancing.
- o Foundation Lunch/Meeting on Friday, January 8
- o ABF Annual Banquet on Saturday, January 9: Always a fun evening with the Live Auction, Sweepstakes drawing, dinner & the Coronation of the 2016 American Honey Queen & Princess.

Guest Room Reservations: Don't forget to make your hotel reservations at the Sawgrass Marriott Golf Resort & Spa. The special rate for the conference is \$125.00 plus tax. A limited number of rooms are reserved at this rate. To secure a room please contact the Sawgrass Marriott Resort by booking online <https://resweb.passkey.com/go/abfconference> or by calling 1.800.457.4653. Reservations must be made by Friday, December 11, 2015 or before the group rooms are sold out, so do not delay. All reservations must be guaranteed with a credit card for the first night's guestroom rate and tax charge.

We hope to see you in January!



The Spring 2016 Apitherapy Course is coming to Spring Creek, NC.

Learn through hands-on practicums what you can do with beeswax, propolis, royal jelly, larvae, honey, pollen, and bee bread products for your health and beauty - inside and out.

WHAT: 2016 Spring Apitherapy Course

WHERE: Spring Creek Community Center

WHEN: March 19 & 20, 2016

COST: \$295 includes your text book.

~

**For registration and more information go to
www.BEeHealing.Buzz**

NOTE: Registration for the Course ends Tuesday, March 1st.

NOTE: This class is limited to 20 students.

No-treatment beekeeping will be held for a full day on March 18, 2016. Go to www.BEeHealing.Buzz for more details.

Cost is \$95 and there are no limits to the number of students.

Bee Science

Meet the Researcher: Dr. Zachary Huang

1. Name: Zachary Huang

2. Occupation: Scientist/professor at a major research university

3. Institution: Michigan State University

4. How did you get your start in beekeeping and what inspired you to seek to study them?

Quite by accident because there was only one scholarship to study honey bees (it has to be in Canada) and I became the one in the whole country to receive it. But once I started getting to know the bees I was stuck with them. They are fascinating creatures due to their highly complex social behavior.

5. What is some past research or programs that you worked with?

I invented the Mitezapper which is now in the market. This device kills varroa mites by heating drone brood, killing both the drone brood and the mites. We have been studying how varroa mite reproduction are affected by different factors. The major finding was that phoretic hosts for mites also affect their reproduction significantly. We have also studied how nosema ceranae affect honey bee health. We discovered mixed infections of both species (*N. apis* and *N. ceranae*) in bees make them die much faster, suggesting the two species are attacking different sub-systems in the workers. The only papers on how transportation affects honey bee health was published from my lab.

6. What are you currently working on?

Right now we are working on how transportation affect honey bee health.

7. Where do you see the next few years of research leading?

I will use molecular tools to study how stresses affect honey bee health.

8. What message about bee health and management would you like to share with readers?

Plant more for bees, use less pesticides to plants, make bees happy (less stress from pesticides, pathogens, parasites and transportations) and they will be healthier.

9. Where can we find information about your research?

Visit <http://bees.msu.edu> for a list of publications & blogs.

10. Anything on or off topic that you find interesting about yourself?

I never tasted honey or seen bees until after I got the scholarship to study bees.

Note from Editor: Dr. Huang is also an accomplished photographer with numerous photos on the web. Visit, For the Love of Apis, his photo library page at <http://zacharyhuang.com/zach/>

11. How can readers contact you? Email to bees@msu.edu is the easiest.



DON'T MISS OUT!

**Kelley Beekeeping is
looking for resale partners!**

Ask yourself these questions:

*Is your local beekeeping community
strong and active?*

Do you teach beekeeping classes?

*Would you like to run a business that
aligns with your passion?*

**If you answered YES,
we may have
an opportunity for you!**



Contact Us Today

Email: aconstant@kelleybees.com

Or Call: 800-233-2899 ex. 213

Bee Health

A Proposed Discussion on Nutritional Migrations: “Rotational Grazing” within Diverse Topographies & their Benefits and Promotions, Part I

by Melanie Kirby

The sun is setting, truck loaded and humming, and the straps are tightened... A migration is about to commence, one resting on the combination of “symbiosis” and “conscience”, between livestock and steward bringing together diverse disciplines to further progress. Food for one leads to food for the many, fortifying individual organismal health and fabricating the woven tapestry of a superorganism’s overall networking immunity and responses. The nectar nomads and pollen pilgrims are following the bloom...

There is a reason that beekeeping falls under the category of animal husbandry: one does soon become married to the promotion of the individual and collective lives that interact with nature to pollinate and substantiate cultivars, wild zones and urban settings. The quest for nutritional and diversified forage is a mounting circumstance extending across the nation and globe. Migrating for forage is a concept well-conditioned within the cerebral physiology of honeybees. Increasing needs are also imprinting the need for migration transfers across landscapes and circumstances for beekeepers. The quest for diversified forage and its impact on diet and nutrition is subject of much inquiry this decade. It is the understanding of what and how the bees’ ingestion and digestion affects interactions on biological, physiological, ecological, agricultural, medical, industrial and commercial enterprise levels.

A nutritional diet is derived from the greater ecosystem and the dynamic environment that is conditioning and evolving around the bees’ quest for forage and their longevity. The ecosystem is a complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space. Its abiotic (non-biological) constituents include minerals, climate, soil, water, sunlight, and all other nonliving elements: its biotic (biological) constituents consist of all its living members. Two major forces link these constituents---the flow of energy and the cycling of nutrients. Ecosystems establish The Food Chain and the understanding of it is now instrumental in assessing and controlling the environmental effects of agricultural development and industrialization (called the “agro-ecosystem”).

The relationship of the agro-ecosystem to honeybees determines the “api-sphere” (regions in the universe that can support honeybees). I am using this term because not all areas are capable of supporting honeybees. Recent research from various ecological, biological, apicultural and environmental scientists around the world indicates that wild patches of forage should be established and promoted. This integrated practice into agricultural and urban zones will benefit pollinator needs in perpetuity¹.

Additionally, new findings on honeybee’s “epigenetic code” are furthering more research into how environment affects genetic dispositions and



Bee Health *continued*

plasticity. Compromised forage and nutrition is thus affecting the health of individual bees, also of their hives' longevity and overlapping network of health as the forage is processed, stored and then disseminated throughout a hive and to developing brood². Toxic residue from pesticides and other contaminants are proving to negatively affect their detoxification genes³. A recent study conducted under field realistic conditions showed that very low exposure of neonicotinoids impacts honeybee genes; causing larvae to work harder to increase activity of genes in breaking down pesticide residue in their alimentation.⁴

To add to the synergistic implications that pesticides used on crops are the pesticides that some apply directly to the bees to control various afflictions. These concoctions are proving to impair cognitive (learning) and biological processes of bees.⁵ Thus, the developed "api-sphere" and its inputs will support biodiversity and ecological balance, either positively or negatively. If there are conditions that are beyond control for supporting a clean and healthy environment and api-sphere for the bees, then the quest for suitable foraging grounds increases.

Finding suitable forage, depending on one's location, can be a challenge. Finding regions of impeccable nutrition free of contaminants is virtually impossible. But there is a method of management that is being practiced in various locations around the globe which are helping to deter malnutrition, enhance biological processes of individual bees and their collective super organisms, and which supports the enhancement of production both of bees and queens, and of hive products.

What nature provides us "for free", defines the parameters of our relationship to this Earth and our individual and collective stewardship. The Ecosystem provides the following-supporting, provisioning, cultural, and regulating- "for free. Supporting includes habitat, biodiversity, photosynthesis, soil formation. Provisioning includes food, clean water, fish, wood, and pollination. Regulating includes cool temperatures, flooding control, purified water, carbon storing, and clean air. Cultural includes, education, recreation, aesthetic, leading back to stewardship.⁶ "Healthy ecosystems provide free 'services' to human communities including: water filtration, groundwater recharging, storm water control, air purification, nutrient recycling, crop pollination and soil enrichment."⁷

As the old adage states, "you are what you eat..." it is apparent that attention needs to be given to nutrition for livestock, and also for other organisms, including humans. It is therefore in our best interest to be cognizant of the interactions and interconnectedness of the ecosystem, the agro-ecosystem, the api-sphere and the biosphere for our own longevity. Thus, the so-called free "services" that are provided by Mother Nature do come at an investment of acknowledgement, discernment and stewardship. The nurturing of nature promotes longevity and provides the ultimate living laboratory to test organismal development and behavior and also promotes the hardiness development and regional fortification, utilizing real world testing circumstances. These real-world testing scenarios include the varying nutrition, and diet that affects development and behavior. Diet and environment can affect what occurs on a cellular level, on conditioned and learned responses, on epigenetic development, and individual and super organismal health networks.

Field case studies pose intense “living laboratory” testing grounds by subjecting stock to temperature swings, topographical circumstances, weather scenarios, and the myriad of microclimates, as chiseled by the landscape. It is these natural testing scenarios that are unpredictable, yet indicative of the capabilities of any particular stock. Finding honeybee stock that can withstand the extremes while remaining productive, healthy, pest and disease resistant and gentle over time, is like finding a needle in the haystack; though when found, is a treasured gem that can be replicated (via grafting and inseminations) and distributed to other nuanced producers. Rearing honeybee stock under such precisely natural scenarios is something that cannot be replicated by man but only encouraged and sought after.

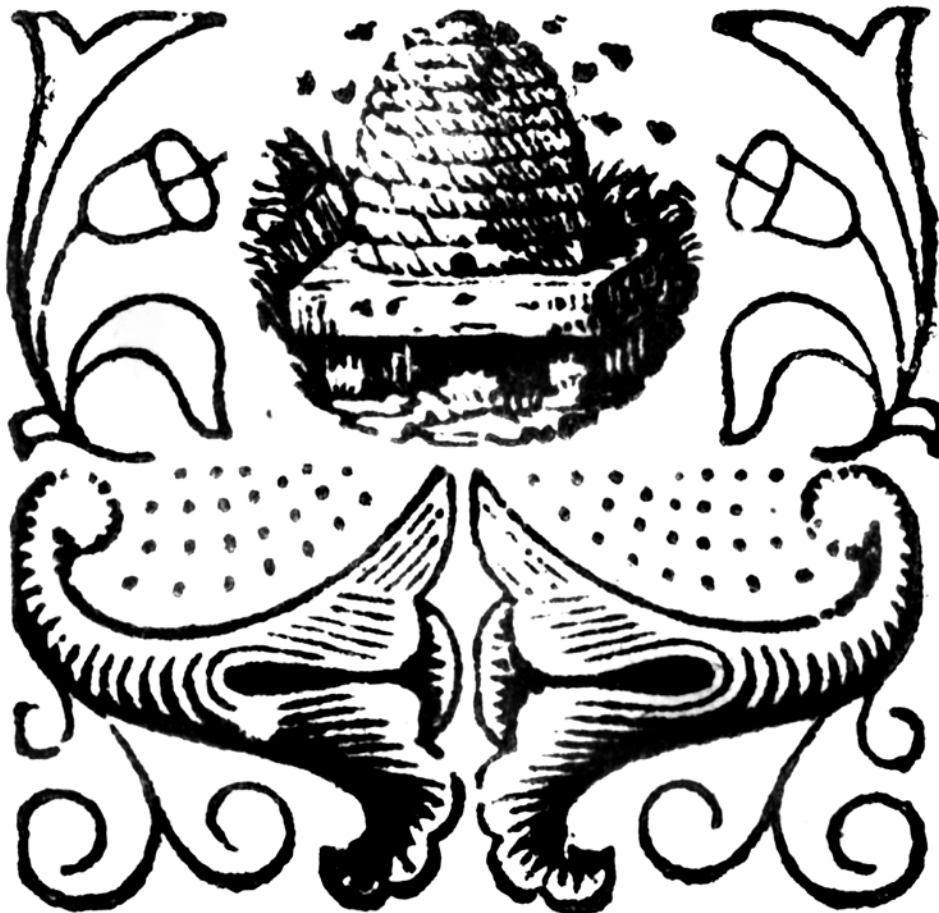
“Nature vs. Nurture” as a derisive term fails to recognize that it is indeed environment and diet (nutrition) that play significant roles in who, how and why cellular development changes between worker and queen casts⁸ and also how sensitive organismal immunity response reacts to fluctuating factors. Additionally, “self medication” of organisms to help regulate immune response demonstrate that a diversified landscape can provide medicinal⁹ diets; affecting bee gut microflora in positive ways. Additionally, compromised nectar from poisonous plants can negatively affect bee diet, especially if there isn’t anything else around.¹⁰ Recent research into honeybee gut flora and nectar processing shows how what nature provides the bees, can indeed also benefit their overall hive immunity response.¹¹

BIBLIOGRAPHY:

1. Luísa G. Carvalheiro, Colleen L. Seymour, Susan W. Nicolson, Ruan Veldtman. Creating patches of native flowers facilitates crop pollination in large agricultural fields: mango as a case study. *Journal of Applied Ecology*, 2012; 49 (6): 1373 DOI: 10.1111/j.1365-2664.2012.02217.x <http://www.sciencedaily.com/releases/2012/12/121205103008.htm>
2. Mark J. Dickman, Robert Kucharski, Ryszard Maleszka, Paul J. Hurd. Extensive histone post-translational modification in honey bees. *Insect Biochemistry and Molecular Biology*, 2012; DOI: 10.1016/j.ibmb.2012.11.003 <http://www.sciencedaily.com/releases/2012/12/121211101942.htm>
3. W. Mao, M. A. Schuler, M. R. Berenbaum. Honey constituents up-regulate detoxification and immunity genes in the western honey bee *Apis mellifera*. *Proceedings of the National Academy of Sciences*, 2013; DOI: 10.1073/pnas.1303884110 <http://www.sciencedaily.com/releases/2013/05/130501132051.htm>
4. Kamila Derecka, Martin J. Blythe, Sunir Malla, Diane P. Genereux, Alessandro Guffanti, Paolo Pavan, Anna Moles, Charles Snart, Thomas Ryder, Catharine A. Ortori, David A. Barrett, Eugene Schuster, Reinhard Stöger. Transient Exposure to Low Levels of Insecticide Affects Metabolic Networks of Honeybee Larvae. *PLoS ONE*, 2013; 8 (7): e68191 DOI: 10.1371/journal.pone.006819 <http://www.sciencedaily.com/releases/2013/07/130702100600.htm>
5. Mary J. Palmer, Christopher Moffat, Nastja Saranzewa, Jenni Harvey, Geraldine A. Wright, Christopher N. Connolly. Cholinergic pesticides cause mushroom body neuronal inactivation in honeybees. *Nature Communications*, 2013; 4: 1634 DOI: 10.1038/ncomms2648; S. M. Williamson, G. A. Wright. Exposure to multiple cholinergic pesticides impairs olfactory learning and memory in honeybees. *Journal of Experimental Biology*, 2013; DOI: 10.1242/jeb.083931 <http://www.sciencedaily.com/releases/2013/03/130327133347.htm>

Bee Health *continued*

6. <http://www.personal-mastership.com/wp-content/uploads/2011/08/www.metrovancouver.comEcosystem.jpg>
7. <http://oregonstate.edu/instruction/anth481/ectop/EcosysSvc.jpg>
8. Frank Lyko, Sylvain Foret, Robert Kucharski, Stephan Wolf, Cassandra Falckenhayn, Ryszard Maleszka. The Honey Bee Epigenomes: Differential Methylation of Brain DNA in Queens and Workers. *PLoS Biology*, 2010; 8 (11): e1000506 DOI: 10.1371/journal.pbio.1000506
<http://www.sciencedaily.com/releases/2010/11/101102171606.htm>
9. J. C. de Roode, T. Lefevre, M. D. Hunter. Self-Medication in Animals. *Science*, 2013; 340 (6129): 150 DOI: 10.1126/science.1235824 <http://www.sciencedaily.com/releases/2013/04/130411142716.htm>
10. Geraldine A. Wright, Julie A. Mustard, Nicola K. Simcock, Alexandra A.R. Ross-Taylor, Lewis D. McNicholas, Alexandra Popescu, Frédéric Marion-Poll. Parallel Reinforcement Pathways for Conditioned Food Aversions in the Honeybee. *Current Biology*, 2010; DOI: 10.1016/j.cub.2010.11.040
<http://www.sciencedaily.com/releases/2010/12/101221101847.htm>
11. Symbionts as Major Modulators of Insect Health: Lactic Acid Bacteria and Honeybees Alejandra Vásquez. E. Forsgren, I.Fries, et al <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0033188>



Bee Arts

Artist Profile:

Ursula Westervelt, Copper Engraving

In 2009 I started back on my copper embossing. My husband and my son are involved with bees, thus I did my first copper embossing with designs of beekeepers, flowers and bees. I entered my art at the Florida beekeepers event and won first prize and best of show.

Today, I have some select art pieces in several art studios around my area. I also do private orders for businesses with their logos. I'm fond of landscape and wildlife pictures, and of course, bees.

I hope you will enjoy looking at some of my art and might want me to do a special design for you. Visit Ursula's website at: <http://ursulascopperembossing.com/>

Note from the Editor: I had the great pleasure of visiting Ursula's booth at the recent Florida State Beekeepers Association Meeting. Ursula is wife to Dave Westervelt, Director of Apiary Inspectors for the state of Florida. Ursula also makes exquisite bee themed jewelry including bracelets, necklaces and earrings! I bought several items as they were just too alluring to pass up and uniquely designed.

To send a photo that you would like her to custom engrave for you and for more info on her exquisite bee jewelry designs, you can reach Ursula at (352) 669-9045 or uschiscopperart@aol.com





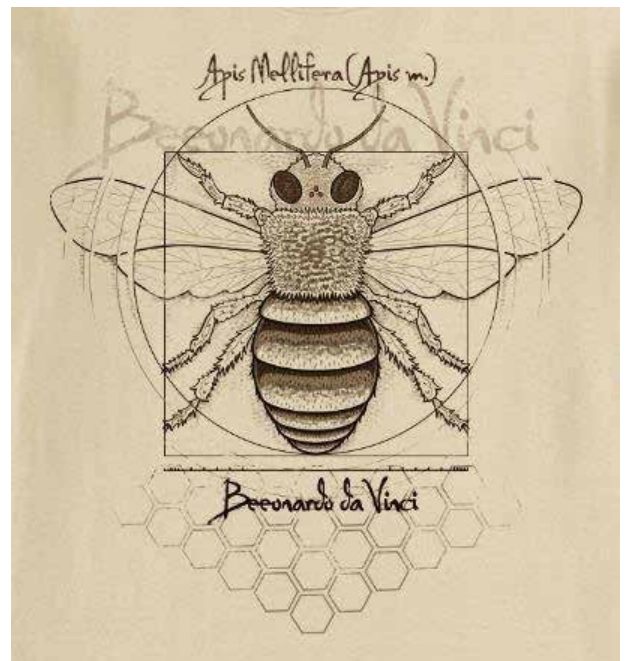
Improving honey bee health and habitat, one hive at a time

Bee Progressive designs bee hives which maximize the overall health of the honey bee. We also provide apiary services to our customers who wish to enjoy the benefits of bee keeping without being a bee keeper.

Our BeeGarb apparel line was created to raise awareness and share our passion for honey bee culture.

To see more designs visit <http://beeprogressive.com/>

A few examples are:



Bee Arts *continued*



<http://everydayartifact.com/>

Everyday Artifact started in 1998 using art printmaking methods and materials to make objects for sale in the gift industry. Their proprietary process — applying images directly to metal and then coating them with jewelry resin — bridges the gap between the 19th Century and today. Everything is made in their Santa Fe, New Mexico studio. The methods and materials used have low impact on the environment, but hopefully high impact on the human spirit. They are proud to be a 100% solar powered business!

They have many bee, flower and nature themed designs. Their wholesale website can also connect you to shops around the U.S. that carry their designs.





UPCOMING EVENTS

December 2016

ID: Idaho Honey Industry Association 2015 Annual Meeting

Dec 3 -4
Red Lion Downtowner, Boise, ID.
For info contact cindy@amgidaho.com.
Tel: 208-888-0988

LA: 54th Annual Louisiana Beekeepers Association Convention

December 4- 5 -- Hilton Garden Inn
400 Mane Street, West Monroe, LA
Info: Joe Sanroma at 318.308.5000
or Amy Weeks 318.325.6614



KelleyBees.com
SHOP ONLINE

January 2016

New Mexico: American Honey Producers Association 45th Annual Tradeshaw & Conference

January 5-9, 2016
Embassy Suites, Albuquerque, NM
Info: <http://www.ahpanet.com/>

Florida: American Beekeeping Federation Palm Trees & Healthy Bees Conference

January 5-9, 2016
Sawgrass Marriott Golf Resort & Spa
Ponte Verde Beach, FL
Info: <http://abfconference.com/>

Texas: 5th Annual Austin Area Beekeepers Association

January 16, 2016
J.J. Pickle Research Campus
10100 Burnet Road - Austin, TX
Info: <http://aabaseminar2016.eventbrite.com>

Kentucky: Eastern KY Winter bee School with keynote Stephanie Tarwater.

Jan. 24 from 9 a.m.-4 p.m. EST
Hazard Community and Technical College.
To register, contact Perry County Extension
agent Charles May at cmay@uky.edu.



February 2016

New Mexico: NM Beekeepers Association Annual Meeting featuring author Mark Winston, Liz Walsh (Texas A&M), Dr. Stephen Rankin & Dr. Don Hyder (NM Medicinal Honey research)

February 5-6, 2015
Info: www.nmbeekeepers.org

Utah: Utah Beekeepers Convention

February 26 - 27, 2016
Best Western CottonTree Inn
Info www.utahbeekeepers.org/convention



We'd love to share news of your upcoming events. Please send the event name, date, website and/or contact information by the 10th of each month for inclusion in the following month's issue. Editor@KelleyBees.com