Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

ISSUE 63: NOVEMBER 2015

IN THIS ISSUE

From the Queen's Court

by Melanie Kirby

The aspens are so delightful this time of year- changing from vibrant green to mouth-watering yellows. The southern Rocky Mountains are a true vision as the snow begins to coat the peaks and the wind blows the changing leaves through the winding roads of the forest. I live on a sky island- which is what they call the extreme ecosystems of the higher altitude landscapes. And it is quite true to its name, we are routinely above the clouds. I spent early October visiting Boulder, Colorado for the Western Apicultural Society Conference. Colorado State Beekeepers President Beth Conrey- who also served this year as the WAS President did a great job including a little bit of everything for everyone, from a kid's bee program with ABF's Sarah Reid, The Bee Girl to Dr. Marla Spivak, Mark Winston, Project Apis M. and a whole morning of medicinal honey information from various practitioners, including Dr. Stephen Rankin, a fellow beekeeper I know from New Mexico.

It was an astounding program and it is exciting to see organizations broaden and deepen their perspectives, approaches and outreach. I'll be broadening and deepening my perspective in a couple of weeks as I travel to Normandy for ANERCEA, the French Queenbeeders Association Conference. I am quite humbled to participate and very excited to visit beekeepers from the land of Oohhh La La! I'll be flying into Paris and then taking the train to Toulouse to visit Dr. John Kefuss. He'll be giving me a tour of various breeding ops in the area and then we'll drive over to Normandy for the conference.

And if that wasn't exciting enough, immediately upon return, I'll be heading to the Florida Beekeepers Association meeting as well. What fun it is to learn and share and learn some more! I find beekeeping to be a truly humbling endeavor…nothing like a little bug to put me in my place time and again. But it is a real treat to know that after 20 years of blood, sweat, and tears—the process of breeding and rearing that my farm has been focusing on is inspiring enough

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Queen's Court *continued*

to share internationally. I can only hope that I'll have the stamina to stick with it for another 20 years- as long as my back keeps cooperating.

This month's issue features some neat stories about technology and bees with the release of a kick starter campaign for EyesOnHives. Also in this month's issue is a story I wrote sharing my experiences from this recent September about Sweet Progress, a chef-inspired program promoting bee husbandry in Nicaragua. Additionally is an article from my muse, M.E.A. McNeil on the Honey Wheel. M.E.A. is a dear friend and I credit her for inspiring and encouraging me to begin to put pen to paper over 8 years ago. My writing is getting a little better—with help from my retired English teaching mother—THANK YOU MOM!

THANK YOU BEES, THANK YOU MOTHER NATURE, & THANK YOU BEEKEEPERS!

Thanksgiving is a time to reflect on all the blessings that have nurtured us—individually, our families, communities and our winged angels of agriculture. Let us give thanks by sharing our blessings and fruits of the harvest with our loved ones and with those less fortunate. Kelley's has all the fixins you need to overwinter your hives properly, with the Bee Cozy Wrap to extracting, bottling and labeling of your cornucopia of honeys. Kelley's catalog also includes candle and soap molds and treats for all the bee lovers in your life from books to puzzles to t-shirts.

Enjoy your turkey with some honey glazed yams!

Merci Beaucoup,
Melanie 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

Got Bees T-shirts
from Kelley Beekeeping.

Bee Cozy Wrap from Kelley Beekeeping.

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

A•Bee•Cs

Beginning Beekeeping

by Dennis Brown

Hello everyone,
I'm frequently asked; "When is the best time to start in beekeeping?" My answer most always surprises them, because they expect me to say, spring time. When they hear the word, fall, they typically look confused. There's so much that should take place before someone actually invests in bees and equipment, because beekeeping can get quite costly. Unfortunately, only one out of five people are still in beekeeping after their third year.

One of the biggest reasons for such a dramatic drop in retain ability is caused by the lack of knowledge a new beekeeper has before getting started. With this in mind, I suggest that if a person thinks about becoming a beekeeper, they should start in the fall. I've listed a few things that a wanna-bee beekeeper should keep in mind as they move forward.

1. During the fall/winter read as much as you can about beekeeping.

2. Find someone in your area who has been keeping bees for a few years and ask them if they would allow you to work their hives along with them. This will give you an idea what is actually involved in keeping bees. Beekeeping is mostly labor intensive, so you need to know if you're up to the task.

3. Learn what equipment you will need to purchase and what not to purchase. Look through the Kelley catalog for pricing. This will give you an idea on beekeeping cost.

4. Plan on raising bees without dumping chemicals into the hive to treat against pests and bee diseases. (I've been keeping bees now for fifty-one years and have never used chemicals. In my book; "Beekeeping: A personal Journey" I teach you how to manage your hives without the use of chemicals.) Using chemicals in the hive pollutes the comb and the hive products you sell to the public. It also weakens the bee's immune system making them more susceptible to bee diseases and pest.

5. Try to avoid those beekeepers that have only been in beekeeping for a few years and think they know it all. There are plenty of those out there. I've been enjoying beekeeping for all these years and can tell you right up front that I don't know everything. The day I say different will be the day I quit.

The point I'm trying to make is that before you pick up any bees in the spring, learn how to care for them. Learn everything you can ahead of time. If you begin your research in the fall before the spring you actually intend to get bees, your success rate will go up dramatically. You will be able to spend more time enjoying your bees instead of spending your time figuring out what's

going wrong. I have many potential beekeepers that actually spend a whole year coming to classes before purchasing any bees. Some of those find out that beekeeping is more involved than they anticipated and drop out saving themselves lots of money. The rest go on and enjoy beekeeping armed with the knowledge of how to care for the bees.

Beekeeping can be such a rewarding endeavor if you're armed with good solid knowledge ahead of time.

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.

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

3

Just the FAQs

Questions & Answers

by Phill Remick

Q: What do you do in winter to improve next year's beekeeping experience?

Thanks for contacting us. Let me answer your question. At the end of the season, I inventory my beekeeping equipment to obtain a sense of what I've done and what I'd like to accomplish next spring. Most of the mite treating is done, so that is out of the way until 2016. Yikes! 2-0-1-6, hard to bee-lieve!

We recently moved and so my address and phone have changed. Repainting and stenciling hives with correct new information will be imperative. Posting name, address and phone on hives has saved me countless times when property owners or adjacent farmers needed to reach me regarding the bees. It is something you may consider even if you only have one hive. This is an invaluable method by which anyone can easily identify your equipment (from a safe distance) and perhaps save your bees from an unwanted fate.

Soon, it will be time to begin assembling new supers, lids and bottom boards, along with building and wiring frames. I use four strands of wire (not two, like most beekeepers) in my wooden frames and take the time to add eyelets. Eyelets prevent wire from cutting into wood on the end bars which allows even greater tightening of it. Four strands provide additional support of the honey comb inside the frame, preventing any sagging and insuring no comb can drop off or flop out. Mr. Langstroth would be proud!

I also incorporate 100% beeswax foundation, instead of plastic foundation (which requires no wiring) when practical. If you've never wired a standard style frame, it takes a bit of finagling, yet it is a rewarding exercise when complete; plus the distinctive fragrance of pure beeswax and its positive effect on honey bees is duly noted.

I will also brand any equipment that may require it, new or older. (We use an electric branding iron, though propane is hotter and more efficient if you're interested.) I bought some nucs in Colorado this spring and want to add to those unbranded frames, my brand: REMICK.

I do recycle a small portion of frames, this dependent on their age and condition. There comes a point of no return with aging equipment, when it simply isn't worth the time, money or energy to attempt repairs. Don't stack in the yard, get rid of it. Once it's stacked it's forgotten!

Have you considered stocking up with sugar for spring feeding? We use caps n'ladders type boardman style feeders which work very well. Don't forget that if you do need to feed when the weather gets colder, any type of liquid should be avoided as it can condense on the lid and drop onto your bee cluster.

Even though you may not deal directly with the honey bees while enhancing your equipment, and preparing for spring, it is crucial work that must be done if you want to be even more successful in your beekeeping endeavor!

Phill Remick is a former commercial beekeeper who teaches beekeeping classes, offers year round apiary troubleshooting, hive management and sells beekeeping supplies near Albuquerque, NM. Contact him at www.NewBeeRescue.com

X•Y•Zs

Advanced Beekeeping

by Liz Walsh

Hello Lyle,

I'm sorry it took so long to reply to you regarding your hive beetle question! I hope you and your bees are well.

I take it, from your question, that you are encountering hive beetle problems? That is unfortunate and is a problem that has rapidly become widespread throughout the country. I haven't heard of good methods to eliminate hive beetles once they are in a hive, but I do have several suggestions to knock down hive beetle populations and to control them, at least to some extent.

When seeking to control a species, it's also a good idea to take a look at its life cycle. Hive beetles lay eggs in small cracks within a hive or in the comb, then the eggs hatch and the larvae cause disproportionately amounts of damage within a hive, then the larvae leave the colony to pupate in the ground, after which they emerge as adults and begin this life cycle again. There are products that you can drench the ground outside of a colony in order to kill pupating hive beetles. Some of these chemicals vary in harshness, but Gardstar seems to be the go to product for anti-beetle soil drenches. If you want to go the non-chemical route, then I've also heard of people letting their chickens live by their colonies. Apparently the chickens love eating immature hive beetles. Other options, with varying reported levels of success, are putting rock salt or diatomaceous earth under the colony, although I haven't actually been in bee yards where either of those has been successfully done. It may also be worth considering putting your colonies on concrete or rock, as the beetles can't pupate in those materials.

There are also modifications to your beekeeping practices which may help control the beetles. The common bit of hive beetle advice everyone seems to give is to "keep strong hives." I always think that this is good advice, but perhaps a little bit silly. Don't we all always try to keep "strong hives"? That said, I think what people really mean by this is "don't have unnecessary space in your colonies." Hive beetles really thrive if they are able to move around in a space without honey bees keeping them in line. Some bees are more anti-beetle than others (potentially a trait to select for when rearing new queens?), but the bees will chase beetles around colonies and into crevices. As such, beetles hang out in places where they are safe from honey bees. That means small spaces like the space between your inner cover and telescoping cover (if you have the inner cover shallow side up) or in-hive top feeders. Eliminating spaces like that is a good step towards controlling your beetle problem. You can do that by switching to migratory covers (something I've seen success with in my hives) or by making sure that the bees always have enough room to chase the hive beetles around your covers. Additionally, don't have any drawn comb anywhere it isn't needed, as hive beetles will hide in it and the bees can't defend everything.

Other things you can do include keeping your colonies in full sunlight. Hive beetle like dark and damp places and don't do as well in full sunlight as they do in shady or damp areas. It is also worth noting

that the beetle larvae are very vulnerable to desiccation (drying out), so if you have your colonies in full sunlight and keep any plant cover under your colonies very short, then that has also helped beekeepers, as the larvae dry out before they can find a good place to pupate. There is also some talk of using essential oils in the colony to deter hive beetles, but I'm hesitant to recommend that because I haven't seen it successfully done and I'm not sure of the exact ratios of oils you would need. That said, I think it is still worth mentioning and, perhaps, experimenting with.

Perhaps one of the best bits of advice I can give is to keep a clean bee yard. Hive beetles love debris. If you have a bee yard or a bee shed full of old combs, old cappings, etc., then hive beetles will use that as a food source and an opportunity to reproduce. As hive beetles can fly (for more than a miile!). this means that you have hive beetle factories going in your bee yards.

I hope some of this advice helps! Good luck with your bees (and your beetles!) and have a good season.

Best,
Liz Walsh
Rangel Honey Bee Lab
TAMU Department of Entomology

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

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Catch the Buzz

USDA Scientist Files Harassment Suit Against USDA ARS

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OCT. 27, 2015

A senior scientist at the U.S. Department of Agriculture filed a whistleblower complaint on Wednesday accusing the federal agency of suppressing research findings that could call into question the use of a popular pesticide class that is a revenue powerhouse for the agrichemical industry.

Jonathan Lundgren, an entomologist with the USDA's Agriculture Research Service, filed a whistleblower complaint Wednesday alleging the federal agency suppressed his research on a popular class of pesticides. (Photo courtesy USDA)

Jonathan Lundgren, a senior research entomologist with the USDA's Agriculture Research Service who has spent 11 years with the agency based in Brookings, S.D., said that retaliation and harassment from inside USDA started in April 2014, following media interviews he gave in March of that year regarding some of his research conclusions.

Lundgren's work has included extensive examination of a class of insecticides known as neonicotinoids, or neonics, which are widely used by U.S. farmers to control pest damage to corn and other crops, helping protect production. The insecticides are sold in forms that both are sprayed on plants or coated on seeds before they are planted. They are also used on plants sold by lawns and garden retailers.

Lundgren is the first to file a formal complaint since questions arose recently about the scientific integrity of research by USDA scientists. The talk has dogged the agency for the last few years and some critics complain that scientific findings on a range of topics are suppressed if they contradict the interests of powerful corporations.

USDA officials had no immediate comment, but have said in the past that claims of interference with the integrity of its scientists' work are not valid. The agency has said that it has strong policies and protections in place to protect the integrity of its scientists' work and "claims to the contrary are simply incorrect."

Neonicotinoids are a particularly sensitive topic because some scientists have linked them to dramatic

declines in honey bee colonies, which help pollinate roughly a quarter of the food consumed annually in the United States.

The agrichemical companies that sell neonic insecticides, such as Bayer AG, BASF, Syngenta AG and others, have said other research shows that neonics are not the problem, and they have been actively lobbying lawmakers and regulators against limiting use of neonics.

Neonics are a key part of a growing global insecticide market projected at roughly $15 billion in revenues.

Lundgren and other scientists have raised questions about both the effectiveness and environmental safety of the insecticides. Research has linked "neonics" to the demise of Monarch butterflies and honey bees, in particular. Two research reports by Lundgren concluded that farmers received no yield benefit at all in using the costly neonic seed treatments.

After Lundgren spoke out about some of his findings, USDA managers blocked publication of his research, barred him from talking to the media, and disrupted operations at the laboratory he oversaw, according to the complaint filed with the federal Merit Systems Protection Board Wednesday.

The filing follows an internal complaint Lundgren lodged with USDA in September 2014.

"Dr. Lundgren's case underscores why legal protections for government scientists are sorely needed," said Jeff Ruch, executive director of Public Employees for Environmental Responsibility (PEER), which is providing legal services to Lundgren in his whistleblower action. "Bureaucracies under political pressure from corporate stakeholders routinely shoot the messenger, even if they are wearing a lab coat."

Lundgren declined to comment about the filing.

PEER filed a legal petition with the USDA in March of this year, stating that the agency needed to strengthen rules to protect its scientists from internal censorship, "political suppression or alteration of studies."

Documents supplied by PEER show that the USDA deemed Lundgren's internal complaint to be without merit, and in August of this year the agency suspended Lundgren without pay for two weeks. It was his second suspension in the past two years. The agency cited violations of travel procedures and failure to follow supervisory instructions as reasons for the suspension.

USDA said Lundgren's submission of a manuscript on neonic harm to Monarch butterflies for publication in a scientific journal violated supervisory instructions. Lundgren's supervisor told him the manuscript was "sensitive' and would require elevated levels of approval, the documents show.

Carey Gillam is a contributing reporter based in Kansas City, Mo. She has worked as a professional journalist for more than 25 years, including 17 years covering food and agriculture for Reuters newswire. For more coverage of the neonicotinoid controversy, check out Harvest Public Media's past work.

Following is a response from The Pollinator Stewardship Council

Independence of Scientists is Integral to Quality Science

The Pollinator Stewardship Council is deeply concerned about the political influence and pressure placed upon scientists, especially U.S. Dept. of Agriculture scientists. Dr. Lundgren's experiences, and reports of other scientists who have faced consequences or investigations, when their work called into question the health and safety of agricultural chemicals is troubling. Dr. Lundgren, and other scientists have documented clear actions that violated their scientific integrity, including:

USDA officials retracting studies
watering down findings
removing scientists' names from authorship
delaying approvals for publication of research papers.

The Whistleblower Retaliation Narrative (http://www.peer.org/news/news-releases/usda-scientist-punished-for-pollinator-research.html) published by Public Employees for Environmental Responsibility (PEER) Oct. 28, 2015, and their previous petition (http://www.peer.org/assets/docs/usda/3_26_15_USDA_%20Rule-Making_Petition.pdf) raises grave concerns for the integrity of the nation's agricultural science. The petition urged the agency to adopt policies to specifically prevent the "political suppression or alteration of studies and lay out clear procedures for investigating allegations and of scientific misconduct."[1] PEER found more than ten USDA scientists who have faced consequences or investigations, when their work called into question the health and safety of agricultural chemicals. The latest Narrative concerning Dr. Lundgren brings these concerns to light again. This time a well-known, and well-respected scientist is making his concerns public.

As beekeepers, we have had many opportunities to work with Dr. Jonathan Lundgren. Beekeepers have even provided our honey bee colonies for his research to better understand and improve the health of honey bees in the U.S. We have found his research to be insightful, unbiased, and supportive of solutions to the concerns of honey bee health.

The U.S. Department of Agriculture has a responsibility to protect the health and safety of the American public, and ensure long-term viability and sustainability of the environment and our natural resources. Dr. Lundgren's research could result in the improvement of our waters which could indirectly financially benefit the Agricultural Community overall by requiring less regulation.

All of the research the USDA conducts must maintain scientific integrity and transparency to ensure it is guiding science-based policy decisions.

The Pollinator Stewardship Council is concerned about the experience of Dr. Lundgren as a USDA scientist. We are concerned about any U.S. Department of Agriculture scientist being harassed and their work censored or suppressed, especially work related to pesticides. We again urge the USDA Inspector General's office to conduct a thorough investigation into this and similar matters. The USDA must maintain scientific integrity by not interfering with the valuable work of its scientists.

Catch the Buzz *continued*

Scientific evidence has implicated insecticides as a leading driver of bee declines, and herbicides as a leading driver of the destruction of pollinator habitat. Beekeepers, honey producers, and the crops pollinated by managed and native pollinators rely on USDA scientists to protect the health of our food supply. Honey bees and native bees pollinate one third of the human diet. For a sustainable and affordable food supply pollinators are key to crop yields, affordable food, and diverse nutritious food.

The USDA must maintain scientific integrity, and not allow harassment, censorship or suppression of science-based findings. The Pollinator Stewardship Council will continue to support scientists who are working to provide quality, unbiased science which will benefit honey bees and native pollinators, and the health and safety of all agricultural stakeholders.

[1] Ruch, Jeff. Petition for Rulemaking United States Department of Agriculture. 26 March 2015. http://www.peer.org/assets/docs/usda/3_26_15_USDA_%20Rule-Making_Petition.pdf

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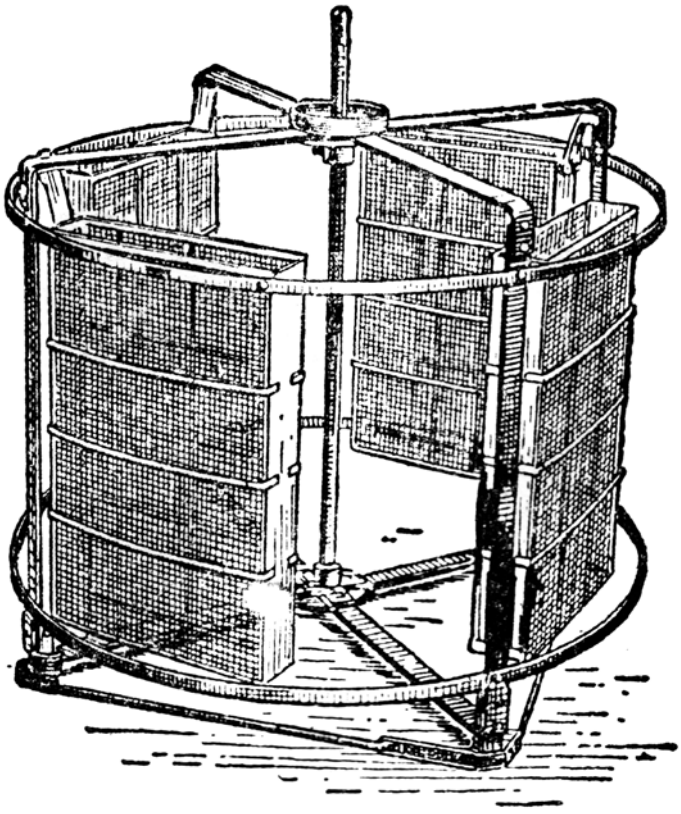

Beekeeping 'Round the Globe

Sweet Progress: A Chef-Inspired Health & Wellness Program Teaching Rural Nicaraguans Honeybee Husbandry

by Melanie Kirby

A couple of years ago, I received a call from a chef named Vincent Cosgrove who was looking for beekeeping technical assistance for a rural development program he was starting in Central America. He had an intriguing and passionate story to share with me of who he is and how he came to launch his non profit idea called Sweet Progress. His story involved world travels and flavors. It became apparent during our phone conversation that Vincent was inspired, and was willing to fund his philanthropic idea abroad.

Originally from Boston, Vincent now travels the world cooking on private yachts of some of the wealthiest families in the world. He had been working on a Russian Czar's yacht and cooking for the Czar's wife to help her lose weight and regain her wellness. Her doctors predicted that she had 6 months to live due to her morbid obesity. Vincent was employed for the task of helping her lose weight and regain her health. Through his uniquely designed diet of healthy foods cooked to perfection, his culinary skills offered more than sustenance to his client- it gave her hope and a new lease on life.

Flash forward a handful of years and you will still find Vincent on a yacht in the Mediterranean, or sailing across the Atlantic to Central America cooking for families who all value his culinary skills and his ability to help those who want to regain their health. Being that Vincent would be stationed on the yachts, his only interaction with others apart from his kitchen staff, was when he would deboard upon docking to procure fresh ingredients and to sightsee. It was upon one of these excursions back on land that Vincent had an epiphany…he was stopped at a stop light in a taxi in Nicaragua. On one side was a huge hummer, monstrous in its size and demeanor. And on the other was a young boy in a donkey cart selling honey.

Local color in Nicaragua.

Intrigued with flavors since his youth, and of course now with a professional career in the culinary arts, Vincent bought a jar. He took a lick and then, everything changed. Not only were his taste buds delightfully inspired, so was his philanthropic nature. He saw the hummer as a large, looming consumeristic entity. And then he saw the young honey vendor in his humble donkey cart. Vincent was in the middle. He knew that he had to do something to help resolve the

disparage between the two worlds- one of opulence and the other of poverty.

Vincent asked the young boy where he got the honey. The young boy told him that it came from up in the hills, at a distance from the capital city of Managua. And so off Vincent went, to witness firsthand where this exquisite flavor originated. Vincent came away from this experience recognizing a fundamental need for education exposure, and economic stimulus. His epiphany led him to initiate Sweet Progress, a wellness program to assist rural women and youth in small animal husbandry, hygienic water and waste practices, soil remediation and entrepreneurship.

Luckily for Vincent, he met and recently married an intelligent international development community educator named Victoria DeLaCruz. Victoria, along with her equipo (team) is the boots on the ground for the Sweet Progress wellness programs. Her team is dedicated and knowledgeable. It consists of a mother and daughter community activist/educator team and an Agricultural Extensionist. Sweet Progress has been networking with other NGO's and educational institutions and agricultural technicians to develop diverse programming aimed at teaching rural women and youth the possibilities for a brighter future through beekeeping.

I had the great pleasure of travelling to Managua, Nicaragua to visit the Sweet Progress team and participants in early September of this year. I was very excited to meet them and see the idea manifesting into reality. So off I went, from 8300' elevation in Truchas to the ocean level tropical landscape of Nicaragua. It was indeed humid, and a shock to my high desert constitution. Victoria picked me up at the airport and immediately took me to have some dinner, a standard meal of red beans and rice, fried plantains, and fresh juice with chia seeds. Now I was ready to be inspired and to go see where and how these flavors have nurtured a Latino culture through the thick and thin of political uprises and economic instability.

Entrance to a hive of Nicaraguan native bees. They are stingless.

The following day we hit the road and went to visit a youth group at the ag college in TipiTapa. These young adults ranging in age from 14-22 demonstrated their interest by arriving early. Some ventured off to water their individual soil remediation plots- growing abonos verdes (green manures/cover crops) in anticipation of next planting season. Others gathered kindling so that we could light our bee smokers to go check on the Africanized bees in the apiary behind the school and livestock grounds. I noted the breeze, though heavy with humidity as it rustled through the banana leaves and huge Jacaranda trees. We walked

about a quarter mile down a dirt trail and then stopped to suit up and light the smokers we would rely on to visit the aggressive bees that occupy their region.

Africanized bees arrived decades ago from South America. Their release in South America was deemed an accident by Dr. Kerr, the man labelled as responsible for these aggressively natured bees migration up to North America. The Nicaraguans have adapted and have learned how to deal with these insects. But how to manage them and steward them, that is where Sweet Progress has been able to assist. Bee equipment from woodenware and protective apparel has all come from the Sweet Progress program. The apiary behind the ag college is where they hold their field practicums. With changing climate, many of the Central American countries are experiencing drought conditions. And so it was on this particular day that we were going to check on the bees and offer them some supplemental feed since there was little bloom available due to the weather.

The bees were of a heightened sense of awareness, their African bee ancestry relegating them to be titled one of the most highly pest and disease resistant strains and also highly aggressive. Working with stinging insects is one thing. Working with stinging insects that are hyper-intelligent and aggressive is another. The youth were calm and collected working together to open each hive carefully and place a small baggie of nectar-like sugar syrup inside. I was impressed at how well they worked together, the teenage girls and boys- pairing up with the instructors and working diligently not to aggravate any of the hives.

That afternoon, we went to visit a rural community that is off the grid. Mud floors, outdoor privies and cooking over a small fire is common in this community. Sweet Progress has been working with women in this community to help them build dry latrines which are bucket composting systems that cost $40 to construct and don't use precious water for waste. These women are also learning about small animal husbandry and were preparing to receive their first hives and pigs.

The following day we visited another women's group that is located closer to the capital. These women took me down the road to show me their growing plots- planting pollinator friendly flowers and fruit bearing trees and vines. They are in the process of clearing a small spot for their group apiary (where beehives are kept). They took me into a tree filled copse and pointed out honeybees that were living in the ground. I was astonished, as I've never encountered honeybees living in anything down so low and in the earth. We prodded the area carefully and discovered that there was a small cavity opening under the loamy soil. Perhaps it led to an old lava tube, which wouldn't be surprising given that Nicaragua is home to over 100 volcanos.

Despite being closer to the city, these women struggled to diversify their incomes; and as the others, the most limiting factor has been exposure and education to learning new things. Sweet Progress is teaching them beekeeping and gardening curriculum. One of our final group visits was to a school for mentally impaired children. The children and staff are learning to sew. There was one young boy who shared with us that he knew where a wild hive was. And still having not melted from the oppressive humidity and heat, off I ventured along with the Ag Extensionist Danelo to take some pictures of this wild hive, which was magnificently perched up in the tree canopy.
And did I mention the stingless bees! Nicaragua and several other Central and South American

countries and Mexico play host to a diverse array of stingless bees. These lil' beauties hover ever so lightly and make their homes in little pocket knots of trees and stumps. Their entrance port looks like a sea anemone tube, though made of delicate wax. Inside, they layer their comb like a pancake and have several princesses instead of a sole queen. They make little wax gourd pots that they store their medicinal honey in, which is highly prized by many Nicaraguans.

My trip ended with a visit to the Vulcan de Apoyo, a volcano crater lake that still emits warmth from its core. The water is turquoise and the slight scent of Sulphur can be picked up when swimming in this pristine lake. I emerged from the water renewed, and rewarded with the majesty of being in such a naturally beautiful setting and planet. Having connected with such a location, its people and culture, I have every intention of continuing to support the Sweet Progress team to help nurture hope and wellness.

Vincent and his wife Victoria are doing a good thing, working with their Nicaraguan and global connections to help promote health and wellness and entrepreneurship skills through beekeeping and other programming. Vincent has already made connections globally for marketing the products that the Sweet Progress participants produce. This will help to generate income for the participants and also give them the ability to share the flavors and culture of their tropical landscape. For more info, visit www.SweetProgress.org.

Melanie Kirby serves as the editor of KB newsletter. She is an international consultant on conscientious beekeeping stewardship and is an avid foodie. She is humbled to serve as an advocate for pollinators and to work with farmers to grow healthy food for our diverse communities and landscapes. Email: ziaqueenbees@hotmail.com

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Bee Science & Health

Keltronix, Inc. Introduces EyesOnHives: Giving Beekeepers and Researchers the Tools to Revolutionize Honey Bee Hive Monitoring

SANTA BARBARA, California — November 2, 2015 — Keltronix Inc today announced the launch of EyesOnHives™ a powerful analytics platform that helps beekeepers, scientists, and other researchers quantify and assess the activity and health of a beehive. With EyesOnHives, beehive activity data and video is gathered more frequently and more accurately than previously possible, and a successful beta study has shown that the tool enabled beekeepers to reduce colony collapse and save beehives.

"We're honored to work with world-class beekeepers and provide them with tools to better understand bee health, and ultimately reduce colony collapse rates," said Kelton Temby, founder of Keltronix. "In just ten months, EyesOnHives uncovered insights into queenlessness, ant attacks, growth trends and orientation activity - the heartbeat of a bee colony. Beyond the science and tech, it's really connecting people with bees." Beekeeping associations and researchers are able to review the growing database of over 350,000 videos and data from the study, and beekeepers report that EyesOnHives has led to timely interventions in 64% of monitored hives.

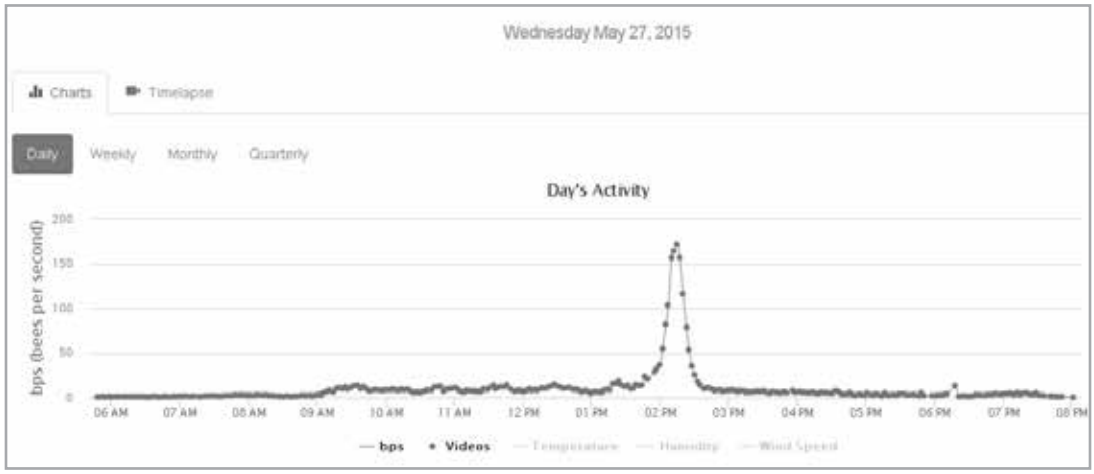
Each EyesOnHives Model B™ device sits a foot in front of a beehive, and runs patent pending algorithms to measure bee activity while recording video, collecting environmental data, and uploading to the cloud-based analytics platform. "We set out trying to document hive activity without interfering with it, and wound up with a health monitor for honey bees," says Temby.

Bees are responsible for one in three bites of the food we eat, and humans have been keeping bees for thousands of years. But for the last decade, beekeepers have been reporting unsustainable losses of bees. In 2014, 42% of bee colonies died in the US. Beekeepers try to 'split' colonies and breed extra queens to replace the lost colonies, but with such high losses, beekeepers and researchers say the present outlook isn't good.

Until now, beekeepers weren't getting early warnings that a honey bee colony was in trouble. "The bees need help, and we want

EyesOnHives monitoring a top bar hive.

to help beekeepers deliver it," says Temby, "so we built an analytics platform for monitoring honey bee hive health." Asked why a technology company would focus on beekeeping, he answers, "We believe beekeeping, like organic farming, supports the health of the environment, and is key to sustainable agriculture. Our mission is to accelerate the transition to sustainable agriculture."



The company has formed partnerships with beekeeping associations, and is in discussion with several universities on future collaboration. After looking at the EyesOnHives system, Dr. Eric Mussen, Emeritus Extension Apiculturist, UC Davis, points out that "Flight activity can be a pretty good indication of what is going on in a hive, but as soon as something looks erratic, you have to go find out why." Dr. Peter Loring Borst of Cornell University and a regular contributor to the American Bee Journal shares of EyesOnHives "At this point you have identified several important changes of the colony's behavior. The data that's being captured by this process shows very clearly there are events that can be identified at a glance. Not just flight activity, but the signature of flight activity gives you a really interesting window into what's going on in that colony at that point in time". Paul Cronshaw, a beekeeper of 40 years, and President of the Santa Barbara Beekeepers Association adds "I can now just take a quick snapshot to check in, like a patient and a doctor, to see how the hive is doing. With that information I can decide I don't have to visit today, or decide there is something going on and I need to take care of it now, or else that hive isn't going to be there in a couple of days". On using EyesOnHives for education and outreach Mr Cronshaw states "I was able to take my phone, put it onto a tv screen, and show my students exactly what the bees are doing".

The company also announced their goal to make a version of EyesOnHives available to hobbyist beekeepers through a Kickstarter campaign launching November 9th. The company states that with enough support they can achieve their goal of building low cost systems, and compile an enormous dataset to further enable researchers to help bees. A video of the project is available at https://www.youtube.com/watch?v=eYnbN3fRlUo.

About Keltronix, Inc.
Keltronix Inc is a technology company with the mission to accelerate the transition to sustainable agriculture. The team has developed patent pending technology and a suite of algorithms to quantify activity in video using distributed processing, and provide analytics and insight to remote decision makers. For more information visit www.keltronixinc.com.

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www.twitter.com/keltronixinc

EyesOnHives, Model B

Keltronix Team

Bee Arts

Honey: The Taste of Terrain

by M.E.A. McNeil

A flavor wheel is a tool to "listen with your nose"

A statue in the garden at the Robert Mondavi Institute for Wine and Food Science at UC Davis is engraved with the likeness of the wine aroma wheel, a tool developed by Ann C. Noble, a now-retired sensory chemist and professor at Davis, and credited with broadening consumer understanding of wine tasting, thereby greatly increasing demand.

It seems only fitting, then, that out of this revered research center for food and wine would also arise a similar tool for describing the deeply nuanced tastes of honey.

In the world of wine, the existence of terroir, the concept that the specific place where wine grapes are grown imparts particular flavor, is still argued by some, but it is an indisputable fact that honeys taste of their environments.

Well beyond the simplistic descriptor "sweet," an entire spectrum of bloom and season opens when a taster is encouraged to pause and savor the rich profusion of scents and flavors of a honey. But something was needed to make that experience as user friendly for the honey-loving public as the wine aroma wheel had for oenophiles.

Enter the Honey and Pollination Center at the Mondavi Institute (Honey.UCDavis.edu), established in the fall of 2012. When Amina Harris was hired as the first executive director of the Center, she had already been evaluating honeys for 35 years in her family business, and she knew that to accomplish the Center's ambitious mission it would take more than just a publicity campaign. The breadth of honey flavors would need to be made accessible. To that end, she immediately set about creating a list of sensory criteria, a cheat sheet for learning to taste honey—like the one for wine.

In developing the wine aroma wheel, Ann C. Noble was looking for "a way of educating the consumer so he has a clue as to what's there. Everybody understands 'pineapples' or 'melons.' That is not vague. On the other hand if you go on about 'complex,' 'wonderful,' 'the mystic aft erglow,' what the hell is that about?"

What she ended up with was a wheel-shaped chart with radii expanding from a center with the most generic terms to more specific around the rim. The meat of Harris' task lay in codifying the entire list of possible specific descriptors.

Thankfully, she was in an ideal place to do just that. The Mondavi Institute had already become a mecca for the assessment of wine, beer and olive oil. Her office is a short bee flight from the Institute's Sensory Evaluation area, where Harris sought out the doyenne of much of the smelling and savoring that goes on there, Sue Langstaff. Langstaff has been a consultant to the wine and brewing industries for over 20 years, identifying, guiding and calling out hyper-sensory forensics.

Langstaff had already created an olive oil tasting panel at the Institute, or, more accurately, a flavor panel. Such panels are typically made up of industry professionals, but Langstaff has another approach. She does not discount genetic ability, but the individual who can taste a pepper at one part per billion, like a grain of sand on a beach, is highly unusual. She believes that sensory analysis is a skill acquired with practice, and she has found know-nothings easier to train than know-it-alls. Average training, however, for a sensory panelist is 60 hours. [Her screening process is entertainingly recounted in the popular book Gulp: Adventures on the Alimentary Canal by Mary Roach (W. W. Norton & Company, 2014), who tried for a seat as a taster.]

The olive oil panel is germane here because so many people trained for it were subsequently selected for the honey flavor panel. "From the standpoint of descriptive analysis, it doesn't matter what you are tasting," explained Langstaff. So it was that she gathered an eclectic group for this new task: Among them were tasters that she'd trained, along with others experienced with wine, beer and chocolate tasting, chefs, beekeepers and one restaurant critic: 21 in total.

"You are being trained to be analytical tools, instruments, measuring devices," she told the panelists. "We don't care about subjective feelings, opinions—how much you like the honey. So if someone smells jasmine, another smells straw and another says it's lovely, we only care about jasmine and straw. They are terms that refer to specific objects that you can actually touch and smell. We are using words to describe the attributes of aroma, taste, flavor, texture and after-flavor of honeys."

Noble has said, "The more precisely you file the information, the more easily you can retrieve it: That is the crux of learning." To that end, Langstaff first introduced a basic tasting vocabulary to the panel. Although humans are capable of smelling thousands of aromas, they perceive only five tastes—bitter, sour, sweet, salty and umami (a savory, broth-like flavor). Salty and umami were set aside as irrelevant to honey, as was sweet because honeys are assumed to be sweet (leaving aside variations in degrees of sweetness). The remaining tastes are bitter and sour.

Photo: Kathy Keatley Garvey

Accordingly, samples of each of these two tastes were placed in front of the panelists, together with an additional sample to illustrate a texture: astringency. "We are learning a foreign language here, the language of honey. If I'm calling something bitter and you are calling it sour, we're not communicating."

With the tastes explored, the group was next directed to address the vastly greater vocabulary of aroma. At the back of the room stood "reference standards": 64 wine glasses that Harris and Langstaff had painstakingly filled with physical samples that illustrate some words from the literature, grouped into categories such as

flowers, fruits, spices, and others ranging from mushrooms to fir to green tea. None were aromas that would indicate a "defect" in the honey, since microbiological issues were not part of the inquiry.

Why such assiduous attention to putting words to scents? Olfaction accounts for 80% to 90% of the sensory experience of food. The nose functions like a gas chromatograph: aromatic volatiles are released by chewing, and they waft up to the upper reaches of the nasal cavity where they bind to nerve receptors that send a signal to the brain. Each receptor acts as a key to the lock of a particular kind of molecule; an odor can involve many molecules and therefore many signals that are perceived as a smell. This process is called retronasal olfaction.

In mammals, the number of genes involved with scent has increased through evolution to over 1,000, making them highly specialized smelling animals. In humans, about 300 of these genes have become dormant through mutation, although they remain active in other mammals— note the greater ability of dogs to differentiate and follow scents than humans. Primates that have developed color vision have large numbers of these functionless scent genes, having traded smell for sight.

One reason that not many people notice the aromas of honeys may be that active "sniffing" is crucial to smell. Only 5% to 10% of scent molecules floating in the air reach the roof of the nasal cavity. And it is difficult to dice out words for smells because smell, unlike other senses, is not consciously processed. In an ancient pattern, it is the only sensory information that is integrated directly into the cortical regions of the brain, to the centers for emotion and memory. Hence how a bite of Proust's classic madeleine brought back a rush of childhood images.

The honey panelists were invited to sniff among the glasses and encouraged to bring to mind words for the scents they were experiencing. "You have to train yourself to associate this way," said Noble. "It's the kindergarten of the nose."

Langstaff says that her first impression of a flavor may be a color, an image, or a sense of warm or cool before she comes up with a word she has learned to name it.

Why not use lab equipment for this analysis? Langstaff points out that, without a human, it would be impossible to assign sensory relevance to, for example, the 716 aroma compounds in pineapple. And, yet, "you can't ask the consumer; their lexicon is 'yum and yuck.'" The sensory evaluator needs to be a neutral reporter, "as analytical as Mr. Spock."

Next, seated again at their stations, the tasters were each presented with a tray on a heating pad holding unnamed, numbered honeys in opaque containers. It was intentionally made impossible to see the color of the honey. "We are focusing on only aroma, flavor and texture, not color," said Langstaff , pointing out that humans rely more on sight than smell. "We don't want to bias you with the color of the honey."

That may be a puzzling step, given that in the commercial market the color of honey is standardized and used to determine value. Lighter hues tend to be more costly, but Eva Crane, a respected authority, found only "a rough connection between color and flavor, in that honeys with delicate flavor are light whereas

dark honeys normally have a strong flavor, but the reverse can also be true." What it comes down to is that color is much easier to quantify than flavor, but blondes don't necessarily have more fun.

Visual clues trump olfactory information, in part because visual input reaches the brain 10 times faster. Olfactory neuronal transduction, messaging, is the slowest in the nervous system, and it is the sense most difficult to verbalize. Interestingly, the dominance of sight data was demonstrated in an experiment at the University of Bordeaux in France, where white wine was disguised as red and tasters used different descriptors than when they had tasted the same wine as white.

The heating mats under the honey trays were there to concentrate the aromas. "For you to smell something, the chemical has to be volatile," said Langstaff. "It has to be able to adhere to your olfactory bulb. The heated volatiles rise to the headspace in the cup." She instructed the tasters to tip the lid first, to smell the gas above the honey. "What comes off are esters, floral compounds."

Some immediately began filling in notes, others closed their eyes and sniffed again, reaching for words.

Finally, small spoonfuls of honeys ranging from orange, macadamia, cotton, several eucalypti, lehua, sage, mesquite, umo, clover, viper's bugloss, pomegranate, along with various mixed wildflower and grocery store brands were held on the tongue and slowly swallowed, producing more silent reverence, more jotting and some "ohhhs." Brows furrowed: The Sacramento Bee's restaurant critic, Blair Robertson, asked himself: "Did I detect molasses? Or was it more like maple syrup?" Tasting is the word used in this situation, but what happens in the mouth and nose is both taste—sensory input from the tongue—and smell, to combine as flavor.

"It's like listening to an orchestra," Langstaff said. "At first you hear the entire sound, but with time and concentration you learn to break it down, to hear the bassoon, the oboe, the strings."

In her intensive sensory evaluation classes at Davis, Noble teaches her students to "listen with their noses." She wanted tasters to be "like an explorer discovering a new ocean."

After the largely silent tasting, Langstaff led a discussion among the panelists. "It tastes different than it smells," was often agreed, as was "It changes as you hold it in your mouth." Many descriptors were similar and often colorful.

The aftertaste of each honey was considered. A honey with a clean finish was described by one as "Having enough acid to wipe away lingering sweetness." Sommelier Orietta Gianjorio described a honey with a short finish as "Like a good-looking man with no brains."

Some opinions were wildly diverse—setting off a round of re-tasting. "We don't all live in the same sensory universe," Langstaff remarked.

The result of all of this intense work is the Honey Flavor Wheel, pictured here and available in hard copy through the UC Davis bookstore ($10) and online at Honey.UCDavis.edu/Products. Proceeds help the Center continue its work and fund the campus' Harry H. Laidlaw Bee Biology Laboratory.

The hope in all this sniffing and savoring is that an educated clientele will emerge with the ability to distinguish varietal and local honeys from the substandard commercially produced honeys most of us may be used to— "like the Mona Lisa from a cartoon," to borrow from Noble.

As Langstaff so eloquently puts it, "It adds quality to life when you stop and taste. When most people slow down and pay attention, they can do it. It is a wonderful gift."

M. E. A. McNeil is a journalist, master beekeeper and organic farmer. Reach her at mea@onthefarm.com.

Featured Speaker: Paul Hawken!

November 11-13, 2015 • Albuquerque, New Mexico

Plentiful, ample, bountiful, generous, fertile, rich, replete—these are words that describe both the attitude and the goals of the next wave of agrarians. A social movement is like an ocean wave. It arises at a certain period of time, gathers strength, grows and works toward a defined goal, becoming an effective agent of change for a while. Eventually, a new wave with fresh ideas and energy heads toward shore, building on the earlier wave's success. Today, the goal is to put the now large and diverse regenerative toolbox to work cultivating abundance for all.

In this conference, we will hear from ranchers, farmers, scientists, activists and others who are leading this next wave.

Visit http://www.quiviracoalition.org/

Mead Making

Beginners Introduction to

EXPLORE THE RICH HISTORY OF THIS FASCINATING FERMENTED BEVERAGE FROM ITS ANCIENT ORIGINS TO ITS RECENT REBIRTH IN AMERICA. TASTE AND LEARN STYLES, INGREDIENT SELECTION, AND THE STEPS TO MAKING GOOD MEAD.

Friday & **Saturday**

November 13 - 14, 2015

Hosted by the Honey and Pollination Center at The Robert Mondavi Institute and the UC Davis Department of Viticulture and Enology

Register: **honey.ucdavis/edu/events**

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.


American Honey
Producers Association
www.AHPAnet.com
Join Us!
47th Annual
Convention
&
Trade Show
January 5-9,
2016
Albuquerque,
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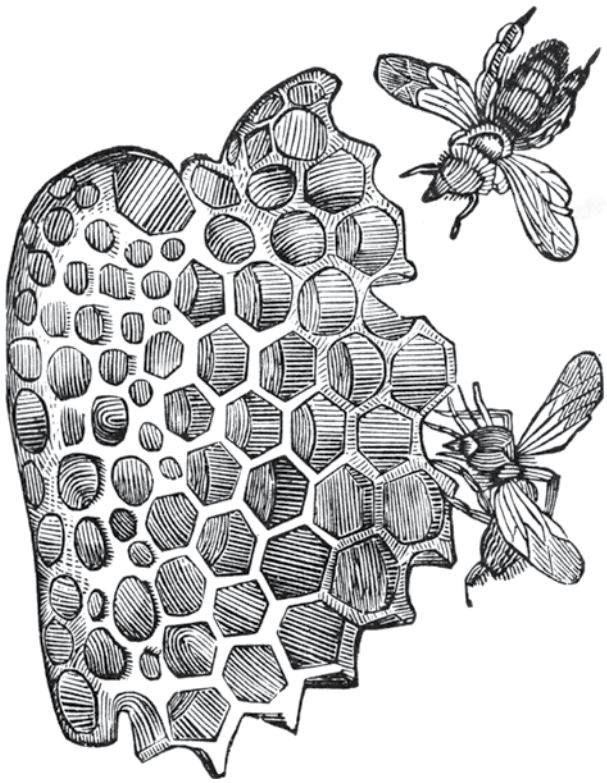

AMERICAN BEEKEEPING FEDERATION

PALM TREES & Healthy Bees 2016

CONFERENCE & TRADESHOW

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.

ABF 1943 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.

UPCOMING EVENTS

November 2015

OR: Oregon State Beekeepers Conference: Products of the Hive
Nov 6 - 8
Oregon Gardens Convention Center
Silverton, OR
Info: www.orsba.org or www.wrbo.org

CA: Beginners' Intro to Mead Making at Robert Mondavi Food & Wine Institute
Nov 13-14
Honey and Pollination Center-
University of California, Davis
392 Old Davis Rd., Davis, CA
Info http://honey.ucdavis.edu/events/introduction-to-mead-making

California: 2015 CSBA Annual Convention
November 16 - 20, 2015
Hilton Sacramento Arden West
Sacramento, CA
Info: www.californiastatebeekeepers.com/events.html

Florida: Florida State Beekeepers Association Annual Fall Meeting featuring Jerry Hayes, Ross Conrad and more.
November 20-22, 2015
Omni Plantation Resort
Amelia Island, FL
Info: www.floridabeekeepers.org
Jennifer Priddy will be attending for Kelley Beekeeping.

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 Lousiana Beekeepers Association Convention
December 4- 5
Hilton Garden Inn, 400 Mane Street
West Monroe, Louisiana 71292
Info: Joe Sanroma at 318.308.5000
or Amy Weeks 318.325.6614

January 2016

New Mexico: American Honey Producers Association 45th Annual Tradeshow & Conference
January 5-9, 2015
Embassy Suites, Albuquerque, NM
Info: http://www.ahpanet.com/

Florida: American Beekeeping Federation Palm Trees & Healthy Bees Conference
January 5-9, 2015
Sawgrass Marriott Golf Resort & Spa
Ponte Verde Beach, FL
Info: http://abfconference.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