



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

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From the Queen's Court

by Melanie Kirby

Tick, Tock, Tick, Tock....It's almost time for a treat! Or, if you have hesitated to get your bees ready for overwintering, it might be a trick! This transitional time of year is one I look forward to. It feels like we can taste the colors of the changing foliage- from light green to yellow to crisp orange and fire bright red.

The transformation from summer to fall reminds me of the resilience of life. The activity of the harvest, picking pumpkins with my kiddos and carving them into jack-o-lanterns is so much fun.

I tend to reflect on the past bee season starting this month. I think about all the work that my buzzy, fuzzy bees accomplished. I think about all the tasks that I managed to get through and the ones that are still on the list. I think about how the bee season is winding down, and it reminds me to change my clocks, to fall back an hour (which might, just might be a trick or a treat depending on where one lives). Oh, how I truly enjoy the start of the autumn season. Truth be told, this is when I'm so tired from trying to keep up with bees that I look forward to putting them to bed...then two weeks later, I begin to start the countdown to spring!

All it takes is a few moments without the bees to recognize that I don't really know what else to do with myself. Does beekeeping define me as a person, or just my profession? Does my profession equal my purpose? These questions swirl around my head like whiffs of pumpkin spice in the breeze. And then I kneel down next to a hive and go through its dazzling combs, and I think to myself, "This is my purpose. Beekeeping is a mindful purpose of care and respect. And I feel so honored to participate."

I feel so honored to be able to interact with such divine creatures. To be able to observe them and to learn from them keeps me filled with awe. The practice of interacting with others who are



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Queen's Court *cont'd*

buzzed about these marvelous beings of sweetness and light is humbling. The ability to connect with gardeners, farmers, students, researchers, communities, and entrepreneurs is dazzling. All in all, it is like the changing colors of the leaves...each season we grow, share, reflect, and rest...and then do it all over again.

This fall brings a new experience for me as I've begun my travels down the road of academia in pursuit of knowledge. Though I've spent the past 20 years in the field learning from bees, beekeepers, Mother Nature and Father Time, I'm now ready to learn from a skilled and enthusiastic team of bee-dazzled scholars. We will work to help bees and beekeepers. We will be advocates for learning and for sharing knowledge. We will grow as we help others grow. Hand in hand, and hive tools at the ready! Just like a hive.

This month's newsletter is full of treats for avid pollinator enthusiasts. We have great Q&A columns this month, and information on some of the upcoming bee conferences here, there and everywhere. There are several articles on the changing weather as well. Kelley Beekeeping offers you this info to satisfy your sweet tooth! Like nectar for your noggin'...food for thought keeps us learning from each other. Check out the great fall specials Kelley's has to offer. They are spooky good!

Reap what you sow!
Melanie Kirby

Cover Photo: www.MichelleHedgecock.com



Pumpkin Stencils at <https://siouxhoney.com/pumpkin-carving-stencils/>

Melanie celebrated her 20th year of professional apiculture this autumn. She has started working on her Masters in Entomology from WSU Sheppard Bee Lab. She has been serving as the Kelley Beekeeping newsletter editor for 4 years. She can be reached at survivorqueenbees@gmail.com.



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KelleyBees**



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New Beekeepers!

Join us for Beekeeping 101

Saturday, November 4th

9:00am - 3:00pm

**Learn the basics of beekeeping
for a successful first year!**

Topics include basic honey bee biology,
how to do a hive inspection, common
beekeeping problems and more!

Class is held at the Walter T. Kelley Training Academy
807 West Main Street, Clarkson, Kentucky 42726

All class participants will receive 5% off at our retail store!

Our store is open 7:00 am - 12:00 pm Saturdays

To register: visit kelleybees.com, search: Beekeeping 101



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

A•Bee•Cs

Beginning Beekeeping

by Liz Walsh

To requeen or not to requeen?

As the Fall season rolls in throughout the U.S. regions, it is important to consider beekeeping strategies before making decisions. Decisions this time of year can include treating or not treating for varroa mites, feeding or not feeding, and requeening or not requeening. All of these major choices can have far-reaching consequences which can have a major impact on a beekeeping operation. This article is about some things inexperienced beekeepers may want to consider before making the personal “to requeen or not to requeen” decision on a per colony basis, and some introduction techniques for if they do decide to requeen late in the season.

Colonies supersede, swarm, and otherwise requeen themselves all the time, sometimes without the beekeeper even knowing that it happened. During the spring or summer season, this is great—if your bees are so talented at requeening that you don’t notice a brood break or anything odd, then they did very well. However, they were able to do so well because they have resources that are unavailable during the winter—a virile drone population, weather suitable for mating flights, good nutritional resources, and more. As such, queens that could otherwise be given the benefit of the doubt and rechecked at your next inspection during the summer do not have this luxury during the winter. If you think a queen might not last the length of your winter, then you should requeen because the colony will die if you are correct.

Questions worth asking before deciding to requeen include:

How old is my queen?

The follow up question to this is “how do you know what you say you know?” If a beekeeper says that they have a three year old queen, then that is great, but how do they know? This is sort of a trick question, as the beekeeper cannot know unless the queen has been marked or her wings have been clipped. Another aspect of this question is “how long do queens from this breeder/rearer normally live in my area?” If the queen breeder normally has queens living a very long time, then a one year old queen might be a very good queen throughout the winter. If the breeder has queens living a short time, or if the beekeeper doesn’t know how the breeder’s queens are, then maybe gambling with a new queen could actually not be a good idea. I personally think that if you have an old queen who is doing spectacularly well, you should let her do her thing, but there are some people who think all colonies should be requeened once the queen reaches a certain age.

This is the international color code for queen marking. Following these marking codes will help to determine age, and also help to visually find the queen in the hive.



QUEEN BEE YEAR CODES

IF YEAR ENDS IN:

1 OR 6 = WHITE
2 OR 7 = YELLOW
3 OR 8 = RED
4 OR 9 = GREEN
5 OR 0 = BLUE

Is my queen showing me warning signs?

If you have an older queen that is doing great, then that is awesome. Colonies requeen themselves quite competently all the time, so you could very well have a very new queen in your colony without having given the bees your permission or encouragement to requeen. There are also some queens that just genuinely live a long time. They, for whatever reason (breeding, stars aligning, etc.), can live to a ripe old age of multiple years. I start thinking about requeening if my colony has shown warning signs. Is the laying pattern spotty? Are there drone pupae mixed in with the worker pupae? Could this be an old queen? Does this colony have a history of weakness in the form of high varroa counts or other disease? Was this one of the colonies that seemed to lag behind the others for no discernable reason? Was this a colony that was too weak to take honey from? If the answers to several of those questions were “yes,” then I tend to consider requeening. Of course, answering many of these questions rides on having kept detailed and organized records of the colony this past season. If there are no records, then maybe you should use this as a learning opportunity and consider keeping records next season.

Are queens available?

It does matter if you want to requeen your colonies if no queens are available. Perhaps the queen supplier you normally use doesn't have queens but someone else in your area does. Is before winter a good time to try out a queen breeder you've never worked with before? I've always thought no, but different people make different choices. If your new source has fabulous queens along with the records and customer reviews to back up the fabulousness of those queens in your area, then perhaps it would be worth trying out new queens right before the winter season.

Am I able to requeen?

Unfortunately, I get a lot of panicked calls and emails from first year beekeepers who need to requeen for some reason or other, have a new queen, and then are unable to find the old queen. It is a bad idea to throw a new caged queen into a colony that has a functional and accepted queen, no matter what your reasoning. That sort of introduction is not going to work, your new queen will just be killed.

Queen Introductions

If you do decide to requeen, there are several things you can do to make your queen introduction a success. The first one would be to find the queen. If you have problems finding her, then cheat! Put a queen excluder



on your colony so you can isolate the queen to one area. The queen will be where the eggs are. If you still can't find her, then consider calling someone who can. Do you have a mentor who could come and help you find the queen? Now would be a good time to utilize such a resource.

Once you have the old queen, you can cage her or put her in her own nuc box with 4 frames or so of brood, food, and bees. It's sometimes a very good idea to keep the old queen as a failsafe until you know the new queen has been accepted into the original colony. You can always kill the old queen later if you have separated her, but if you kill her and then the colony doesn't accept your new queen, then you have very few options-especially at the end of the season when queens are harder to come by.

To introduce the new queen in a late season requeening attempt, I take out the old queen and make sure there is open brood in the colony. It seems like my colonies don't like accepting queens late in the year compared to earlier in the year, so sometimes these introductions are difficult. If I am able, I let the colony stay queenless for 6-8 hours, or overnight even, and then I put my new caged queen into the colony. It works better for me this time of year if I can mask her pheromones a little initially. If the weather is warm enough, I'll spritz sugar or vanilla water on the caged queen and the frames I sandwich her between. The sandwiched frames are frames with emerging and open brood. If I can't find a frame with both, then I do a frame of emerging brood and a frame of open brood. This is because introductions seem to go easier if the colony also has new brood pheromones accompanying the new queen. Additionally, the youngest bees are going to be the nicest bees in the colony to the new queen—some of the first tasks a new worker does are nursing and queen attending.

In the spring, I like doing soft releases where I put a mini-marshmallow or fondant in the end of the cage and let the bees eat her out. I'll check the colony two or three days later to make sure she made it out of the cage and then leave them alone for another 10 days or so before checking for eggs. However, because queen mortality seems higher during Fall introductions, I do direct (or "hard") releases this time of year after three day introductions. A three day introduction is when I insert the queen in her cage which I've taped or capped over the candy tube so the bees cannot start to eat through and release her until I remove the tape (in 3 days). I do this so I know the queen is alive when she is released from the cage and so that I can double check that the workers are not trying to ball the cage or otherwise bully her. If the workers are being mean, then I put younger open brood by the cage again, do another sugar or vanilla water spritz, and try the next day. If the workers are still being mean after an additional day, then I figure they will never accept her. While this is unheard of in my Spring colonies, it is rare, yet present in my Fall colonies.

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



Just the FAQs

Questions & Answers

by Dennis Brown

Hi Dennis,

Would this be too late in the year to split a hive? Or would it be better to wait until spring? Both of my colonies have large populations and I was thinking it might be good to split them. They have two brood boxes and two mediums on them at the moment. I'm trying to figure out the best way to prepare for winter.

Sharon

Hello Sharon,

It's better to have your hives in two brood boxes with no honey supers on top if there's no honey flow going on. Soon (in Texas) the queen will begin her upward journey to her winter spot in the upper box. She could already be in your honey supers if there's no queen excluder separating the honey supers from the brood boxes.

It's hard to get a properly mated queen this time of year because of the lower drone numbers. A lot of times when you purchase a queen this time of year (or later) she will be superseded in early spring because there were not enough drones in the area for her to mate with. So with that in mind, I would wait until spring to make a split. Besides, it's always best to go into winter with strong hives. I hope this helps.

Enjoy your bees!

Dennis

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



X•Y•Zzz

Advanced Beekeeping

by Bella Donna

THE STORM AFTER THE STORM

Personal Experiences of Beekeepers After Irma

Here are some true heroes in the aftermath of Hurricane Irma in Florida. As beekeepers, we know the daily, weekly, monthly and annual challenges we all go through. Blow that up into big screen, and we can get a glimpse of beekeepers trying to keep things going throughout a massive natural disaster. God bless them all.



Still with some trauma, worry, stress, and clean up, these men allowed me some time to interrupt their non-stop schedules to answer some questions so we could all get a little peek into the devastation and the aftermath of Hurricane Irma. Now I'm hearing from other beekeepers that the mosquito spraying during the cleanup is killing bees that survived what they thought was the worst of things. The storm after the storm. Couple that with the devastation of the crop production, current and future bee food. Hard times.

Allow me to introduce a small-scale beekeeper, a lifelong beekeeper who has known nothing else, and a large-scale commercial beekeeper. My hats off to each of them, and all other fellow beekeeping friends who continue to put their lives and their bee yards back together again.

Name: Tim Ashby, Six-year, small-scale beekeeper, Pensacola, Florida. "Continuing to learn all the time in a world that continues to change."

How prepared are you usually for a hurricane and/or flooding?

Other than a few tweaks to take care of, like tying things down, we stay prepared. In general, it is something you must be prepared for in our corner of the world. Just like blizzards up north, or earthquakes in places prone to them. It should be part of the planning when setting up an apiary.

Is it possible to explain in words your feelings or experiences as a beekeeper during something as traumatic as an impending or actual hurricane?

Thankfully we didn't take a direct hit. We did prep for Irma to come our way because you never know, but it didn't get too bad here, sustained winds were 30-40 miles per hour, but that was it. I am already on high ground so flooding wasn't going to be an issue with the hurricane. Wind was the big concern for me. I have hives on concrete blocks that I put ratchet straps over to keep the covers on. I use migratory tops on all my equipment so I wasn't too concerned about damaging the lids. I also have other hives that are on 8' long stands made of 2x4's and 4x4's. These were all strapped down to the stands as well.

After a disaster, what would you say is the best type of support that other beekeepers or anyone could be or offer?

In our case here in Florida, the Florida State Beekeepers Association and their President, Tony Hogg, have send out many links to assist those who have been affected, as well as The Institute of Food and Agricultural Sciences (IFAS), in conjunction with county extension offices.

On a personal level, having drinkable water to last several days is a must. Think of it as being off-grid for several days. And most importantly, taking care of yourself so that you can take care of everything else when the event is over.

Name: Richard Bittner, Forty-years, small-scale commercial beekeeper in Cleveland Ohio, and Avon Park, Florida. His contact is: <https://www.facebook.com/bittnerbees/>

How prepared are you usually for a hurricane and/or flooding?

Keeping bees out of low-lying areas where water will build up fast is hard to do in Florida. Normally if you're along a creek you try to put them on extra pallets or an embankment that's higher than the water level. Most commercial beekeepers will move their hives out of Florida during hurricane season. Beekeepers that keep their hives in Florida all year long keep weights on top of the top boards- cinder blocks, rocks, etc. The biggest concern is falling trees; pine trees and oak trees are always coming down during a hurricane.

All my locations where I was in the shade under the pine trees are gone now. We try to find shady places to put bees in Florida because of the heat. Who likes to actually work bees in the sunshine when it's that hot? It's hard to prepare for a storm that you don't know how destructive it can be, so we all do our best. And we stay constantly as prepared as possible.

Is it possible to explain in words your feelings or experiences as a beekeeper during something as traumatic as an impending or actual hurricane?

When I was living in Arizona I had my bees in a flash flood area and didn't know it. The day Phoenix hit a record high of 124 degrees after two inches of rainfall in 15 minutes, I had 20 hives wash away with equipment and everything. We learn over the years by our mistakes, thankfully, but sometimes those lessons are very costly in time and money. When you're big you make big mistakes when you're small you make small mistakes.

After a disaster what would you say is the best type of support that other beekeepers or anyone could be or offer?

Like this hurricane, it's scary knowing you are in the path of something as destructive and dangerous,

and the possibility of losing everything that you have. Just like any other profession the only support you can offer to others is food, water, shelter and a lot of encouragement.

Name: Shane Meeks, Commercial Beekeeper, working bees in Sebring, (central) Florida.

How prepared are you usually for a hurricane and/or flooding?

We usually are very prepared. We have straps that go around the top of the hives and pallets. We always have them lifted on freight pallets in low areas no matter what. We also make other preparations like boarding up the honey house, shop, etc. We watch the weather continuously and have been through many hurricanes. Irma set us back. The eye of the storm went right over us. Our crew happened to be in Wisconsin when the storm hit. Our yards in Florida got flooded. We aren't sure yet the exact damage to our bees and apiary.

Also, the Brazilian pepper is a fragile fall crop in Florida, that we most likely lost. It allows us to make splits and nucs each year. We expect to have to feed and give pollen substitute to make up for the lack of the crop. The only thing you can do for a hurricane after crop is pray!!

Is it possible to explain in words your feelings or experience as a beekeeper during something as traumatic as an impending or actual hurricane?

As a commercial beekeeper, the bees are your life, and your life is the bees. You raise your family on that income. If nature gives you a curve ball like a hurricane and you lose hives it becomes stressful. There is a lot of stress and heartache with beekeeping in general; throw in a natural disaster and it is mega-compounded.

After a disaster what would you say is the best type of support that other beekeepers or anyone could be or offer?

Best thing we know to do is help others by bringing in equipment to move the bees out of the flooded or damaged area. The faster you get the bees out, the better chance you have to save some of them. Beekeepers always try to be there for other beekeepers; you never know when you'll be the one in trouble and needing some help.

For a bird's-eye-view of the hurricane itself, this is a link to footage of the storm and aftermath of Hurricane Irma to Fort Myers, Florida, on September 9, 2017, filmed and narrated by Tim Huffman

—<https://www.youtube.com/watch?v=RDKXrhJfrWo>

Tim's contact info is: <https://www.facebook.com/tim.huffman.5>

Bella Donna is a holistic healthcare practitioner, apitherapist and beekeeper from Central Arizona. She can be contacted through www.beehealthy.biz.

Diversified Pollinators

The Bee & Butterfly Habitat Fund

Who founded The Bee & Butterfly Fund?

The Bee & Butterfly Habitat Fund is a collaborative effort of founding partners Pheasants Forever, Project Apis m. and Browning's Honey Co. Additionally, the partnership is funded by a very diverse group of supporting stakeholders with shared goals.

What is the mission of The Bee & Butterfly Fund?

Habitat loss is one of the most severe threats to honey bees, monarch butterflies and other pollinators. While it is not the only issue affecting them, it is one that all stakeholders can agree needs focus, as access to good, clean forage is the most basic and fundamental requirement in sustaining healthy populations for pollinators. As more and more research is published about the negative effects of agricultural land use change on soil, water, wildlife, climate and pollinators, the opportunity to garner support for establishing habitat from many stakeholders continues to increase. Currently, there are other pollinator habitat efforts, but none of them are designed or suited well enough to reach the most important goals. The purpose of The Bee & Butterfly Habitat Fund is to support the needs of pollinators through a private conservation program that is designed to accomplish two primary goals.

The first is to replace critical forage in areas where pollinators traditionally live. Landowners enroll eligible acres, usually field edges or odd areas on the farm, through Pheasants Forever in a three-to six-year contract. Landowners are provided free seed, technical assistance, an establishment reimbursement and an annual payment, based on acres. The program's effects are verified and monitored by research, and also by the beekeepers and landowners involved. The monitoring and research is designed to deliver the second goal, which is to demonstrate a better model for pollinator conservation through the use of more cost-effective, pollinator-preferred seed mixtures, better establishment procedures and management techniques which reduce weed competition issues, and boost foraging opportunity for bees. The habitat mixtures are designed to produce maximum value on every acre throughout the growing season by increasing the diversity and density of bloom.

What do farmers and landowners get for participating in the program?

- Free seed mixtures, designed with specific goals in mind
- Annual rental payments
- One-time planting incentive payment
- Flexible contracts for 3, 4, 5 or 6 years
- Better habitat designs



How do you choose the locations for habitats?

Applications are reviewed and scored by biologists. Factors influencing selection include project size, cropping history, proximity to an existing apiary and funding availability. Landowners who choose to donate incentive payments will be given prioritized consideration.

Each project has two practices—a honey bee mix and a native mix. We are cost effective, just \$90 per acre will establish perennial habitat! Landowner incentives include free seed, \$15 per acre for planting and an annual rental payment.

Diversified Pollinators *cont'd*

What pollinators do your habitats support?

For this program, enrolled landowners receive two separate seeding mixtures:

- 50 percent of each project will be established with a mixture designed to provide superior forage and nutrition for [honey bees](#). Seeding mixtures will vary by state and geography.
- 50 percent of each project will be established with a mixture of plants necessary for the life cycle and nutritional needs of [monarch butterflies](#). Seeding mixtures will vary by state and geography. Many of these native species will also benefit populations of native bees and other populations.



Are there any limits to what land can be included in the program?

Land that is currently in native rangeland is not eligible for enrollment in the program. Land that is currently in grass cover (non-native rangeland) will need to have the existing grass cover removed through chemical application (using both a fall and spring spraying of a non-selective herbicide) prior to enrollment in the program.

Do I need to be near an apiary (beekeeper)?

Part of the application and ranking process is the location of the proposed project to a registered honey bee apiary in the state. Visit the appropriate state website to determine the location in miles from the project site to the nearest registered apiary.

[South Dakota](#)
[North Dakota](#)

[Minnesota](#)
[Iowa](#)

[Nebraska](#)
[Missouri](#)

How do I get the habitat seed mixes?

The pollinator habitat seeding mixtures will be provided in the program at no cost to landowners. Our biologists have designed seeding mixtures to meet specific habitat and nutritional requirements for the target species to ensure maximum wildlife benefits are being obtained. All seed orders will be delivered directly to landowners, with the fluffy seed separated from the small, slick seeds. This seed mixing combination is designed for projects that will be planted using a no-till grass drill with multiple seed boxes.

How can I find out more information or enroll in the program?

The first step in the enrollment process is to complete the Bee & Butterfly Habitat Fund application form. See complete [Program Guidelines](#) here. Contact us at info@beeandbutterflyfund.org to request an application. For more information, call 1-866-431-4230.

Bee Science

Climate Change and Bumble Bees

New research from a team of Florida State University scientists and their collaborators is helping to explain the link between a changing global climate and a dramatic decline in bumble bee populations worldwide.

In a study published today in the journal **Ecology Letters**, researchers examining three subalpine bumble bee species in Colorado's Rocky Mountains found that, for some bumble bees, a changing climate means there just aren't enough good flowers to go around.

The team examined the bees' responses to direct and indirect climate change effects.

"Knowing whether climate variation most affects bumble bees directly or indirectly will allow us to better predict how bumble bee populations will cope with continued climate change," said FSU postdoctoral researcher Jane Ogilvie, the study's lead investigator. "We found that the abundances of all three bumble bee species were mostly affected by indirect effects of climate on flower distribution through a season."

As the global climate changes gradually over time, delicately poised seasonal cycles begin to shift. In the Rocky Mountains, this means earlier snowmelts and an extended flowering season.

On the surface, these climatic changes may seem like a boon to bumble bees—a longer flowering season might suggest more opportunity for hungry bees to feed. However, Ogilvie and her collaborators found that as the snow melts earlier and the flowering season extends, the number of days with poor flower availability increases, resulting in overall food shortages that are associated with population decline.

"When researchers think about flower effects on bees, they typically consider floral abundance to be the most important factor, but we found that the distribution of flowers throughout a season was most important for bumble bees," Ogilvie said. "The more days with good flower availability, the more bees can forage and colonies can grow, and the bigger their populations become. We now have longer flowering seasons because of earlier snowmelt, but floral abundance has not changed overall. This means we have more days in a season with poor flower availability."



This is Bombus bifarius, one of the three species of bumble bee studied by the Ogilvie and her team. Credit: Jane Ogilvie

Bee Science *cont'd*

Declining bumble bee populations globally have long been cause for alarm among conservationists, who see the buzzy pollinators as a bellwether for the malign effects of a changing climate.

Ogilvie said these most recent findings contribute to a growing body of evidence for the grave ecological consequences of climate change.

"Declining bumble bee populations should be a warning about the expansive detrimental effects of climate change," Ogilvie said. "Bumble bees have annual life cycles, so their populations show responses to change quickly, and many species live in higher altitude and latitude areas where the change in climate is most dramatic. The effects of climate change on bumble bees should give us pause."

The damage inflicted by climate change on global pollinator populations is of particular concern for scientists, as these species are crucial to agricultural productivity and the propagation of natural plant communities.

As researchers work toward a better understanding of climate change and its ecological effects, the link between pollinator health and shifting climate processes is becoming impossible to ignore.

"Pollinator species around the world have been declining, but we are still learning about what might be causing declines," said FSU Professor of Biological Science Nora Underwood, a coauthor of the study. "Although not all species are influenced in the same way, I was excited to be part of this study because we now have long-term data that shows changing climate is influencing bumble bees."

While this research helps to confirm the long-presumed connection between climate change and bumble bee population decline, Ogilvie said that the findings indicate a more difficult path for conservationists than previously anticipated.

"I'm afraid that this research shows conservation will be even more complicated than expected," she said. "In addition to the response of the target species, our findings suggest that we should be considering how a species' food resources might be responding to climate change. For bumble bees in particular, we need to make sure that they have enough flowers available during the entire season."

Story Source:

[Materials](#) provided by Florida State University. Original written by Zachary Boehm.

Note: Content may be edited for style and length.

Journal Reference:

1. Jane E. Ogilvie, Sean R. Griffin, Zachariah J. Gezon, Brian D. Inouye, Nora Underwood, David W. Inouye and Rebecca E. Irwin. Interannual bumble bee abundance is driven by indirect climate effects on floral resource phenology. , 28 SEP 2017
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Bee Health

Bee-harming pesticides in 75 percent of honey worldwide

AFP Relax News, October 6, 2017

Traces of pesticides that act as nerve agents on bees have been found in 75 percent of honey worldwide, raising concern about the survival of these crucial crop pollinators, researchers said Thursday. Human health is not likely at risk from the concentrations detected in a global sampling of 198 types of honey, which were below what the European Union authorizes for human consumption, said the report in the journal **Science**.

However, the study found that 34 percent of honey samples were contaminated with "concentrations of neonicotinoids that are known to be detrimental" to bees, and warned that chronic exposure is a threat to bee survival. Bees help pollinate 90 percent of the world's major crops, but in recent years have been dying off from "colony collapse disorder," a mysterious scourge blamed on mites, pesticides, virus, fungus, or some combination of these factors.

"The findings are alarming," said Chris Connolly, a neurobiology expert at the University of Dundee, who also wrote a Perspective article alongside the research in **Science**.

"The levels detected are sufficient to affect bee brain function and may hinder their ability to forage on, and pollinate, our crops and our native plants."

Neonicotinoids have been declared a key factor in bee decline, and the European Union issued a partial ban on their use in 2013. For the **Science** study, the European samples were collected largely before this ban took effect, Connolly said. Further research is needed to gauge the effectiveness of the EU steps.

Five common pesticides

Bees collect nectar as they pollinate plants, and over time this sugary liquid accumulates into the thick syrup of honey.

To test contamination levels, samples of honey were taken from local producers worldwide, and researchers tested for five commonly used neonicotinoids:

acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam.

These pesticides, introduced in the mid 1990s, are based on the chemical structure of nicotine and attack the nervous systems of insect pests.



Traces of pesticides that act as nerve agents on bees have been found in 75 percent of honey worldwide, research says.

Bee Health *cont'd*

"Overall, 75 percent of all honey samples contained at least one neonicotinoid," said the study, led by Edward Mitchell of the University of Neuchatel in Switzerland.

"Of these contaminated samples, 30 percent contained a single neonicotinoid, 45 percent contained two or more, and 10 percent contained four or five."

The frequency of contamination was highest in the North American samples (86%), followed by Asia (80%) and Europe (79%). The lowest concentrations were seen in South American samples (57%).

"These results suggest that a substantial proportion of world pollinators are probably affected by neonicotinoids," said the study.

'Serious concern '

Our planet is home to some 20,000 species of bees, which fertilize more than 90 percent of the world's 107 major crops. The United Nations warned in 2016 that 40 percent of invertebrate pollinators -- particularly bees and butterflies -- risk global extinction. Experts said that while the findings are not exactly a surprise, the threat posed by neonicotinoids should be taken seriously.

"The levels recorded (up to 56 nanogram per gram) lie within the bioactive range that has been shown to affect bee behavior and colony health," said plant ecologist Jonathan Storkey, who was not involved in the study.

"Scientists showed earlier this year that levels of less than 9 ng/g reduced wild bee reproductive success," he added.

"I therefore agree with the authors that the accumulation of pesticides in the environment and the concentrations found in hives is a serious environmental concern and is likely contributing to pollinator declines."

According to Lynn Dicks, natural environment research council fellow at the University of East Anglia, the findings are "sobering" but don't offer a precise picture of the threat to bees.

"The severity of the global threat to all wild pollinators from neonicotinoids is not completely clear from this study, because we don't know how the levels measured in honey relate to actual levels in nectar and pollen that wild pollinators are exposed to," she said.

The levels of exposure to harmful pesticides may be far higher than what can be measured in honey, said Felix Wackers, a professor at Lancaster University who was not involved in the research.

"This shows that honeybees are commonly exposed to this group of pesticides while collecting neonicotinoid-contaminated nectar from treated crops or from flowers that have come into contact with spray drift or soil residues," he said.

"The actual level of exposure can be substantially higher, as the honey samples analyzed in this study represents an average of nectar collection over time and space."

Beekeeping 'Round the Globe

Coffee and bees: New model of climate change effects

Overcoming doomsday scenarios depends on biological intelligence

Smithsonian Tropical Research Institute, September 12, 2017

Summary:

Areas in Latin America suitable for growing coffee face predicted declines of 73-88 percent by 2050. But bee species diversity may save the day, even if many species in cool highland regions are lost as the climate warms.

Areas in Latin America suitable for growing coffee face predicted declines of 73-88 percent by 2050. However, diversity in bee species may save the day, even if many species in cool highland regions are lost as the climate warms. The research, co-authored by David Roubik, senior scientist at the Smithsonian Tropical Research Institute, will be published in an early online Proceedings of the National Academy of Sciences edition between Sept. 11-15.

"For my money, we do a far superior job of predicting the future when we consider both plants and animals (or in this case the bees) and their biology," Roubik said. "Traditional models don't build in the ability of organisms to change. They're based on the world as we know it now, not on the way it could be as people and other organisms adapt."

A research team modeled impacts for Latin America, the largest coffee-growing region under several global-warming scenarios -- considering both the plants and the bees. The team consisted of experts from the Smithsonian in Panama; the International Center for Tropical Agriculture in Vietnam; the Tropical Agricultural Research and Higher Education Center in Costa Rica; Conservation International and the University of Vermont in the U.S.; CIRAD in France; and CIFOR in Peru.

Despite predicted declines in total bee species, in all scenarios at least five bee species were left in future coffee-suitable areas; in about half of the areas, 10 bee species were left. For land no longer suitable for coffee production, the team recommended management strategies to help farmers switch to other crops or production systems. In areas where bee diversity is



<http://cdn.images.express.co.uk/img/dynamic/128/590x/secondary/Honey-Bees-367292.jpg>

Beekkeeping *cont'd*

expected to decrease, but coffee can still be grown, adaptation strategies may include increasing bee habitat and maintaining native bees. Many coffee types prefer to grow in the shade of tall trees. Choosing tree species that favor bees is a win-win strategy, according to the authors.

Roubik's favorite example of a potentially huge environmental change that did not play out as predicted is the case of Africanized honey bees, which were accidentally released in Brazil in 1957. Roubik's studies in Panama of coffee pollination taking native rainforest bees into consideration began in the 1970s as the aggressive non-native Africanized honey bees swarmed north through Latin America. Doomsayers predicted the worst: that the killer bees would disrupt the delicate balance between tropical forest species and their native pollinators. Roubik discovered the opposite to be true. In lowland tropical forests in Mexico, plants pollinated by very busy Africanized bees ended up producing more flowers, thus making more pollen and nectar available to native bees.

"Africanized honey bees in the Western Hemisphere both regulate their nest temperature and their own body temperature using water," Roubik said. "When the climate is hotter -- unless it's too dry -- they're better adapted to endure climate change and pollinate coffee -- an African plant."

By paying attention to biological processes and managing coffee for maximum pollination depending upon the effects of climate on both the plants and the bees, as well as strategically adjusting shade, rotating crops and conserving natural forests, it may be possible for coffee producers to adapt to climate change.

Journal Reference:

1. Pablo Imbach, Emily Fung, Lee Hannah, Carlos E. Navarro-Racines, David W. Roubik, Taylor H. Ricketts, Celia A. Harvey, Camila I. Donatti, Peter Läderach, Bruno Locatelli, Patrick R. Roehrdanz. Coupling of pollination services and coffee suitability under climate change. *Proceedings of the National Academy of Sciences*, 2017; 201617940 DOI: 10.1073/pnas.1617940114

Smithsonian Tropical Research Institute. "Coffee and bees: New model of climate change effects: Overcoming doomsday scenarios depends on biological intelligence." *ScienceDaily*. ScienceDaily, 12 September 2017. www.sciencedaily.com/releases/2017/09/170912102816.htm



Meet the Beekeeper

Billy Synk, Project Apis m.

Name: Billy Synk

Occupation: Director of Pollination Programs

Location/Institution: Sacramento, CA - Project Apis m.

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

I was an undergraduate at The Ohio State University. I needed a job so I searched for positions offered by the university. The job database was organized alphabetically. After brief scrolling I arrived at the B's. I immediately saw what looked like the coolest job ever; assistant beekeeper. I rode my bike out to the Rothenbuhler Honey Bee Research Laboratory and meet Sue Cobey. She hired me on the spot. I worked closely with her until she left to accept a position at elsewhere. By that time, I was hooked on bees. They are fascinating creatures. The implications poor honey bee health has on pollination, agriculture, the economy and the environment are so vast it permeates into our everyday lives.

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

After getting my degree from Ohio State I worked with hybrid seed producers here in California. Along with all my plant breeding tasks, I managed the alfalfa leafcutter bee rearing and pollination. I then took a Staff Research Associate position at UC Davis where I expanded my knowledge of honey bee biology, habitat restoration, and native bees.

What are you currently working on?

As we enter late summer and early fall I spend most of my time managing the Seeds for Bees program. The hives getting trucked out to California in the early spring for almond pollination are very hungry. Many have not seen a flower in months. Seeds for Bees was created to entice almond growers to plant cover crops in their orchards so these hungry bees can forage on alternative sources of pollen before, during , and after almond bloom. Last year more than 6,100 acres of cover crops were planted in or around orchards. Growers appreciate how the cover crop pollen helps bee



Billy Synk inspecting hives.

Meet the Beekeeper *cont'd*

hives become stronger. Interestingly, from the grower perspective the soil amending qualities of cover crops is the main driving force for adoption of the practice.

Where do you see the next few years of research or beekeeping management leading?

The most exciting and useful research for bees will surround the topic of controlling Varroa. As the community waits for research to develop new technologies like RNAi we are also having a conversation about how to most effectively use the materials we currently have at our disposal.

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

Habitat, forage and the nutrition they provide is something that captivates me. Much of beekeeping literally happens inside a black box...well ok I guess mostly white boxes. Growing a plant and watching it bloom is something all of us can do. It is a way non-beekeepers can partake in improving bee health. By planting forage/habitat homeowners, growers and beekeepers alike are engaging with the landscape in a dynamic way. As it turns out the proper forage for honey bees is also perfect habitat for butterflies, native bees, pheasants, grouse, songbirds, and other wildlife. It is a rare opportunity to work on something that benefits your own industry while also supporting biodiversity in general.

Where can we find information about your research/organization?

For more information on the latest research, and forage and habitat projects like Seeds for Bees and the Bee and Butterfly Habitat Fund please visit our website at <http://www.projectapism.org/>.

Anything on or off topic that you find interesting about yourself/organization to share with readers?

I live in California and the Seeds for Bees program connects California Almond Growers with free cover crop seed. However, it should be noted Project Apis m. focus is far wider than the west coast. For example, the Bee and Butterfly Habitat Fund, based in the upper Midwest, helps landowners create more habitat on the landscape. This is an important area of the country that beekeepers have relied on. North Dakota is the number one honey producing state. Hopefully the trend of increased destruction of valuable summer time feeding grounds for honey bees will be stopped as people continue to donate to the Bee and Butterfly Habitat Fund.

How can readers contact you and get more info on your organization?

I love to talk about whatever you love to talk about! Have a question about forage, cover crops, or bees in general? Drop me an email at Billy@ProjectApism.org





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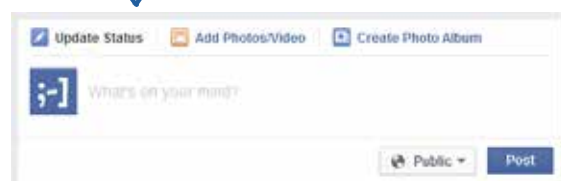
1

Copy the URL from the address field.
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3



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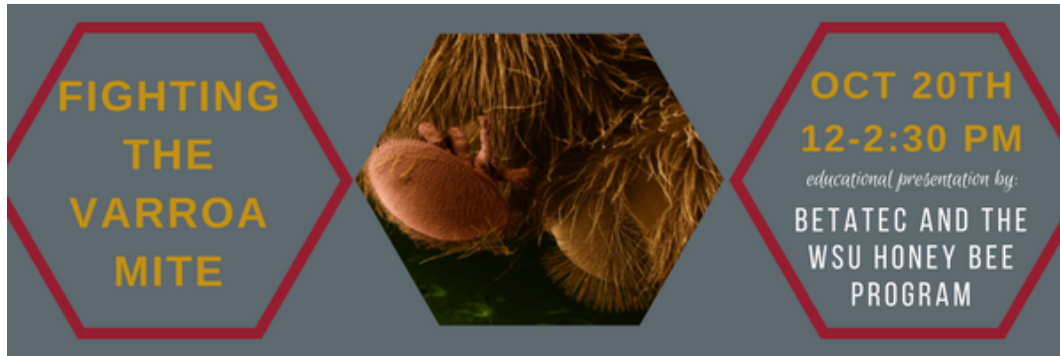


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Bee Thinking About



Please Join the WSU Honey Bee Research team and BetaTec for an afternoon of education. Learn about new applications for HopGuard® and see how this product can offer key advantages for beekeepers.

Featured Speakers:

Dr. Brandon Hopkins, WSU Entomology
Fabiana Ahumada, BetaTec Global Bees, Business Manager

October 20, 2017
12:00-2:30 p.m.
WSU Pullman Campus, Ensminger Pavilion
455 Lincoln Dr, Pullman, WA 99163

Free Lunch Sponsored by BetaTec

Please RSVP to Janet McGough, mcgough@wsu.edu or 509-335-8010, by October 18, 2017. No cost to attend.

**please indicate in your communication if you have dietary restrictions.*



2017 WFAN Annual Conference — Celebrating 20 Years!

1997 – 2017: Rooted in History, Growing for the Future

Thursday – Saturday, Nov. 2 – 4, 2017

Sheraton Madison Hotel, Madison, WI

Join us as we celebrate 20 years of engaging women in building an ecological and just food and agricultural system through individual and community power!

Our keynote speaker will be food justice activist LaDonna Redmond. LaDonna Redmond is a long-time community activist who successfully worked to get Chicago Public Schools to evaluate junk food, launched urban agriculture projects, started a community grocery store and worked on federal farm policies to expand access to healthy food in low-income communities. In 2009, Redmond was one of 25 citizen and business leaders named a Responsibility Pioneer by Time Magazine.

LaDonna launched the Campaign for Food Justice Now. CFJN's mission is to end all forms of injustice and exploitation in the food system. CFJN seeks a comprehensive approach that includes the social, historical, cultural, environmental and spiritual elements of a solution to food justice.

Currently, LaDonna is the Diversity and Community Engagement Manager for the Seward Community Co-op in Minneapolis. While working at Seward, LaDonna fulfilled her personal goal of helping to build a co-op grocery store in an urban African-American community. It is known as the Friendship Store, and is the second location for Seward Community Co-op. Watch her TEDx Manhattan talk - <https://www.youtube.com/watch?v=ydZfSuz-Hu8>.



Many of you have asked us for more time at the conference, and we are listening! This year's conference will be a full day longer than our usual annual conferences. We'll begin with pre-conference intensives and tours on Thursday, Nov. 2, and continue with workshops and other events Friday and Saturday, Nov. 3 and 4, at the Sheraton Madison Hotel.

To make your reservation, [visit this link](#). (There is also a Comfort Inn next door and a Holiday Inn Express about two blocks away.) If you are a student or beginning farmer, you receive a \$25 registration discount. Use the code **wfanstudentfarmer2017** where prompted.

As always, there will be plenty of time for networking, a great slate of farm and urban ag tours, and lots of delicious, locally grown food!

For more info, visit: <http://www.wfan.org/2017-wfan-annual-conference-celebrating-20-years/>



Friday, November 10, 2017
At TBA Convention in Temple, Texas
 Rules at texasbeekeepers.org

Friday Honey Show	
Extracted Honey	
•Light	
•Light Amber	
•Amber	
•Dark	
•Creamed Honey	
•Chunk Honey	
•Black Jar Honey	
•Beeswax	
•Arts and Crafts	
•Photography	
•Beekeeping Gadgets	
•Mead Competition	

Saturday Honey Related Education	
•Preparing for the Honey Show	Ann Harman
•Varietal Honey Harvesting	Clint Walker
•Marketing Honey Commercially	Tim Tucker
•Encaustic Painting	Kim Lehman
•Mead Making Demonstration	Mike Simmons

Sunday Tour
Walker Honey Farm
Dancing Bee Winery

No entry fee For TBA members or Convention attendees. If neither: \$5 per entry.

Trophies	Sponsors
•Best of Honey Division	•Dadant
•Best Small Scale Honey	•Dancing Bee Winery
•Best Sideline Honey	•Moore Honey
•Best Commercial Honey	•R. Weaver Apiaries
•Best of Non-Honey Division	•Sabine Creek Honey
•Best of Mead Division	•Sweet River Honey
•Sweepstakes	•Walker Honey Farm



2017 TBA Convention
November 9-11, 2017 | Mayborn Convention Center | Temple, TX



"Helping Texas Beekeepers Keep Honey Bees Alive Since 1850"

TBA 2017 Beekeeping Workshop

Thursday, November 8th * 9:00 am - 4 pm

\$60 early registration for members \$75 non members,
\$75 registration for members at convention/\$90 non members
Prices for Thursday Workshop only

Keeping Bees Alive!

Presenter: Jennifer Berry

Apiculture Research Professional and Lab Manager, University of Georgia Honey Bee Program

Keeping bees alive today can be challenging, but with the right information, it's not that difficult. We will discuss all aspects of how to keep our bees healthy and happy, from proper hive placement and nutrition to keeping Varroa populations down. It is about time that our honey bees thrive instead of the pests that have parasitized them for so long.

2017 Annual TBA Convention

November 9th -11th

Mayborn Convention Center *Temple, TX * 9 am to 5 pm

Register at www.texasbeekeepers.org

Break out educational sessions include beginning and advanced beekeeping and hive product topics.

	Early Registration	At the door
<i>TBA Member; Full Conference, Fri. Nov. 10th & Sat. Nov. 11th</i>	\$80	\$95
<i>Family – Full Conference, Fri. Nov. 10th & Sat. Nov. 11th</i>	\$140	\$160
<i>Single Day – Friday or Saturday</i>	\$45	\$60
<i>Jennifer Berry's "Keeping Bees Alive" Workshop; Thurs. Nov. 9th</i>	\$60	\$75
	Early Registration	At the door
<i>TBA NON Member; Full Conference Fri. Nov. 10th & Sat. Nov. 11th</i>	\$110	\$125
<i>Family; Full Conference Fri. Nov. 10th & Sat. Nov. 11th</i>	\$160	\$180
<i>Single Day – Friday or Saturday</i>	\$60	\$75
<i>Jennifer Berry's "Keeping Bees Alive" Workshop, Thurs. Nov. 9th</i>	\$75	\$90
	<i>All Attendees</i>	
<i>Queen's Luncheon – Friday November 10th</i>	\$19	\$24
<i>Awards Dinner – Friday November 10th</i>	\$32	\$40
<i>Lunch Ticket – Queen's Quiz Bowl Sat. Nov. 11th</i>	\$11	\$16
<i>Texas Honey and Mead Competition Entries</i>	Free	\$5

2017 TBA Convention

November 9-11, 2017 | Mayborn Convention Center | Temple, TX

Ranching and Farming at the Radical Center
It's all about soil, water, and neighbors
NOVEMBER 15 – 17, 2017 ALBUQUERQUE, NM

The annual Quivira Conference is internationally renowned for bringing together leaders, innovators, and stewards of the land for three days of provocative plenary presentations, roundtable discussions, and networking with diverse attendees from across the southwest, the country, and globe. The conference creates a unique environment where ideas are sown, exchanged, and grown. Quivira's outstanding speakers and attendees contribute expertise in ranching, farming, conservation, community, and all things soil, which is the key to it all. Every attendee brings something unique to the table, and each departs with inspiration, new connections, broader perspectives, and the tools necessary to effect change.

In two decades of collaboration, we have grown a web of knowledge and a network of human relationships focused on soil, water, and neighbors. Our original tagline—working to achieve harmony between humans and nature—has changed and our methods have evolved, but the essence of our work has not. We continue to cultivate innovation, education, collaboration, and hope as the nexus from which soil is restored and relationships are grown. This year our gathering will take a particularly people-oriented approach, bringing the community together in conversations about how to focus on what really matters... ranching and farming at the Radical Center.

Working in the Radical Center allows us to concentrate on land health and community building. It blocks noise and distraction and keeps us focused on action in the places where we make the biggest difference. In the past two decades, we've developed a deeper understanding of ecosystem complexity and a growing toolkit for healing land, restoring watersheds, and strengthening community. The 2017 Quivira Conference will focus on how to foster the human relationships that allow us get this work done.



Together at this year's conference we'll explore the myriad work and social relationships that make for healthy people and a resilient planet, with particular attention to the role that ranchers and farmers play in cultivating

Bee Thinking About *cont'd*

them. From watershed restoration and rangeland monitoring that bring ranchers and conservationists together—to growing crops that encourage balance between bacteria and fungus for carbon sequestration—to matching aspiring and retiring ranchers working together on meaningful land succession—Quivira's success and the ability for lasting and meaningful impact is rooted in a deep commitment to relationship building.

We invite you to join us!

Connect

Hear from experts. Make lasting connections. Take home new skills and ideas. Begin partnerships for change. For 15 years, the Quivira Conference has been a hub for individuals and groups coming together around the concepts of fostering ecological, economic, and social health through education, innovation, collaboration, and progressive public and private land stewardship.

Come together

The Quivira Conference is renowned for bringing together a broad community as diverse as the lands they manage. Our attendees come from across the southwest, the country, and the globe and bring their expertise as farmers and ranchers, scientists, government agencies, conservationists and innovators in managing healthy land. Whether you are a young farmer preparing to dig your hands into the soil for the first time or a professional interested in new ideas and opportunities for collaboration, our conference has something for you.

Attend

You can find a breakdown of pricing for the conference, special events, dinners, and workshops on our Conference Registration page.

Special rates are available for Early Bird registrants, Quivira Members, and Young Farmers/Ranchers and Students attending their first Quivira Conference. Additionally, some scholarships are available. Interested in sponsoring scholarships? Visit <https://quiviracoalition.org/conference-registration/> to register and for more information.



Sweet As Honey

Spooky Sweet'n'Sour Strips

by Beatrix Royale

Honey Ginger Candied Grapefruit Peels

This recipe makes a lot of candied peels. Save the cooking syrup and use to sweeten tea and Italian soda.

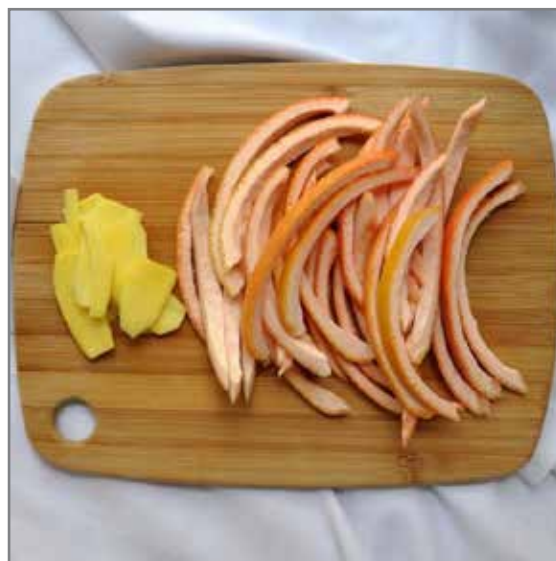
<https://pinchandswirl.com/honey-ginger-candied-grapefruit-peels/>

Ingredients

- 2 large ruby red grapefruits
- 2 1/2 cups natural cane sugar divided
- 1/2 cup honey
- 2 2-inch pieces fresh ginger peeled and very thinly sliced

Instructions

1. Line a baking sheet with parchment paper and place a cooling rack inside. Set aside.
2. Cut each grapefruit in quarters, from top to bottom.
3. Separate one corner of peel from flesh and use a spoon to pry out the fruit.
4. Repeat with remaining quarters.
5. With a sharp knife, cut the peels into long, thin strips.
6. Place the peels in a medium sauce pan and add enough cold water to cover.
7. Bring to boil; reduce heat and simmer for 3 minutes.
8. Drain.
9. Repeat this process twice more.
10. Remove the peels from the pan and add 2 cups water, sugar, and honey; bring to boil.
11. Stir in grapefruit peels and ginger slices; reduce heat to low.
12. Simmer on low for 1 1/2 – 2 hours until peels are translucent. Remove from heat.
13. With a slotted spoon, lift peels and ginger slices from syrup and arrange on cooling rack.
14. Allow to dry for a few hours or even overnight.
15. Scoop remaining 1/2 cup sugar into a bowl.
16. Add grapefruit peels and ginger slices a few at a time, pressing them into the sugar to coat.
17. Store at room temperature in an air tight container.





UPCOMING EVENTS

October 2017

**Kentucky: Kelley Bees Beekeeping 101
October 7, 2017**

<https://www.kelleybees.com/beekeeping-101.html>

**New York: Annual Greater NY Bee Conference featuring Dr. Nicholas Nager
October 8, 2017**

Farmingdale State College
2350 Broadhollow Road, Farmingdale, NY
Info: www.longislandbeekeepers.org

**New Jersey: Rutgers Bee-ginner's Beekeeping: The Basics of Apiculture
October 11-13, 2017**

Rutger's Eco Complex
1200 Florence-Columbus Road
Bordentown, NJ
Info: www.cpe.rutgers.edu/courses/current/ae0401ca.html

**New York: Rochester Beekeepers present Peter Sieling: The Mysteries of the Bee Hive Explained
October 14, 2017**

Hansen Nature Center, Tinker Park
Info: Rochesterbeekeepers@gmail.com

**Oklahoma: Oklahoma State Beekeepers Fall Conference
October 27-28, 2017**

Will Rogers Garden Exhibition Center
3400 NW 36th St, Oklahoma City
Info: www.okbees.org

**Connecticut: Honey 101: Introduction to Honey Tasting
October 28-29, 2017**

Info: www.americanhoney Tastingsociety.com
or email ahts.usa@gmail.com

**Connecticut: CT Backyard Beekeepers Association featuring Kirk Webster
October 31, 2017**

Norfield Church Community Room
64 Norfield Road, Weston, CT
Info: www.backyardbeekeepers.com

November 2017

**Kentucky: Kelley Bees Beekeeping 101
November 4, 2017**

<https://www.kelleybees.com/beekeeping-101.html>

**Wisconsin: WI Honey Producers 2017 Fall Convention with Dr. David Tarpy, Ross Conrad & Dr. Marla Spivak
November 2-4, 2017**

Holiday Inn -Eau Claire South
4751 Owen Ayres Court
Info: <http://www.wihoney.org/>

**Mississippi: MS Beekeepers Association 2017 Annual Convention with Dr. Jeff Harris, Dr. Jim Tew, Phil Craft, Kent Williams, David Burns, Richard Adee
November 3, 2017**

SW Mississippi Community College
1156 College Drive, Summit, MS
Info: mshoneybee.org

**California: Charles Mraz Apitherapy Course & Conference
November 10-12, 2017**

The Recondo Beach Hotel
400 N. Harbor Drive, Redondo Beach, CA

Info: <http://www.apitherapy.org/about-aas/coursesconferences/cmacc/>

**Iowa: IA Honey Producers Association 105th Conference with Marion Ellis & Dennis VanEnglesdorp
November 10, 2017**

Gateway Church of Nazarene
140 Gateway Drive, Oskaloosa, IA
Info: www.iowahoneyproducers.org

**Ohio: Advanced Beekeeping Class
November 11, 2017**

OSU Extension Building
39 Wall Street, Jefferson, OH
Info: <https://www.facebook.com/AshtabulaCountyBeekeepersAssoc/>

**California: CSBA 2017 Convention with Dr. Marla Spivak, Dr. Dennis VanEnglesdorp, Dr. Elina Nino
November 14-16, 2017**

Harrah's Lake Tahoe, 15 Highway 50, Stateline
Info: californiastatebeekeepers.com/events.html

**Connecticut: CT Backyard Beekeepers Association with Dr. Jennifer Berry
November 14, 2017**

Norfield Community Church
Info: www.backyardbeekeepers.com

**New York: Empire State Honey Producers Association Fall Meeting- joint meeting with Ontario Beekeepers' Association (Canada); Theme: North x NorthEast
November 16-18, 2017**

Sheraton on the Falls Hotel
6455 Fallsview Blvd, Niagara Falls, NY
Info: <http://www.eshpa.org/fall-meeting/>

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