

Kelley Beekeeping SERVING THE BEEKEEPER SINCE 1924

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From the Queen's Court

by Melanie Kirby

Last month I had the great pleasure of traveling to the west coast. Apart from working with some fantastic northern Californian bee breeders, I also got to visit beekeepers in British Columbia. My hosts were Jeff and Amanda Lee who both work for the Vancouver Sun in the reporting department. Jeff also serves as the Vice President of the British Columbia Honey Producers Association.



I left San Jose on a cloudy bay area

mid March day and arrived in Vancouver a few hours later. What a thrill it was to see signs in English and French...thank goodness my high school and college lessons in French finally paid off. However, I was glad to know that my hosts speak English. I kept a keen eye at the arrival exit for Jeff, who likes to wear an Aussie hat, felted and stylish. His demeanor is down to earth and in discussions, it is easy to notice his intelligent style and literary resourcefulness.

His wife Amanda is super pretty in pink- which I was able to discern is her favorite color. She as well is down to earth and very interesting. I actually met Amanda first, at the American Beekeeping Federation's North American Beekeeping Conference held this past January in Anaheim, California. She and I both attended Mark Winston's, Writing about Bees workshop. Those who attended this workshop were invited to share an interesting bee story and Amanda's caught my attention right off the bat. I hope to publish her bee story in an upcoming issue.

Her story involves her introduction to beekeeping—through hissing cockroaches! Now doesn't that make you want to read more?! I sure want to. I'll save the details for her story publication but I wanted to share this bit as it is intriguing. Upon picking me up at the airport, we headed out in Jeff's truck to our destination of Kamloops, which is several hours away from Vancouver—where the semi-annual association meeting was held.





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Queen's Court continued

The conference was superb—which included a panel of professionals discussing pesticides and bees. The panel included a beekeeper (who had lost thousands of hives to pesticide drift kill), a spokesperson for CanAgra (who represents all the chem-ag companies), a native bee researcher, and a spokesperson for the canola industry of Canada. Jeff is very diplomatic so he served as the moderator and kept the panel discussion in smooth order. In the end, it was apparent that all the members of the panel are on the same page about most things—that with healthy habitat stewardship, communication between stakeholders, and observance of ag practices, both culturally and economically, we can come to a reconciliation or a common ground for keeping our bees alive, healthy and productive.

After a couple of days of learning how to use bees as therapy for at risk populations, native bee integration for pollination, and Liz Huxter's fabulous presentation on the mighty Drones, it was time to head back to the states. Jeff and Amanda drove me back to Vancouver to catch my flight back to California. It was then that I was able to see the landscape shift from glacial to city landscape...and funny how Merritt looks just like my home of Truchas in the southern Rocky Mountains. I told my Michigander husband—when I retire, I want to go to BC—where it looks like Michigan and New Mexico landscapes fuse.

Right before flying out, I got to really learn what Jeff & Amanda are up to in their bee yards and just how serious their beekeeping has become for them. They are like others the bees have found, who want to dedicate more time and energy of their professional lives to honeybee stewardship. They took me to a couple of their bee yards and Io and behold, they are not joking—they are serious about their beekeeping and are looking forward to beginning their journey to breeding some of British Columbia's finest honeybees.

I wish them super success with their beekeeping. It is this sort of camaraderie that I cherish. You can read more about beekeeping in Canada in this newsletter's Beekeeping 'Round the Globe segment by Paul Kozak-Ontario Provincial Apiarist. Additionally, EAS—the Eastern Apicultural Society will be holding their annual conference in Ontario this August. And, the Heartland Apicultural Society will be the month before in July in Albion, Michigan. The Western Apicultural Society will be



British Columbia beekeepers, Jeff & Amanda Lee.

Queen's continued

holding their annual conference this year in Boulder, Colorado in October.

Finding and learning that there are more of us out there who seek to promote positive honeybeestewardship by putting our sweat into action helps to validate our insanity...or better put, our understanding that without the bees, there would be little for us to look up in the sky.



Productive hives make all sorts of products in AManda's hands.

This month's issue is full of

interesting info. I decided to hold off including Bee Science and Bee Health segments this month as we have a lot of content to share on milkweeds, Agrilicious!, American Apitherapy Association conference, and wild fermented honey wine! Of course at this time of year- not only should one stop to smell the flowers, but also keep your head tilted up and your eyes open for those swarms!

May the Buzz be with you! Melanie



Melanie Kirby has been keeping bees professionally for 19 years. She has been blessed to learn from beekeepers on 2 continents, 5 states and 4 countries. She will get to practice her French again this fall when she visits queen breeders in France. She and her husband specialize in survivor stock queen breeding, exquisite apiceuticals and consilience based research in the southern Rocky Mountains of northern New Mexico. She can be reached at editor@kelleybees.com



COVER PHOTO: Elizabeth "Izzy" Forbes (pictured).

Izzy Forbes is an School Psychologist for the city of Bowling Green, Kentucky. In her free time, she loves traveling, reading, and tending to her bees. She especially likes the challenge of catching a swarm and giving them a good home. She has been keeping bees since 2009.

Luke Bartlett (photographer)

Luke works at Western Kentucky University in their Intramural Recreational Sports Department. He started keeping bees on a whim in 2007 and has never looked back. Always up for a good swarm adventure, he also loves talking about bees with those interested in learning the ways. If you have a question you would like to share, email it to Editor@KelleyBees.com

A•Bee•Cs Beginning Beekeeping

by Phill Remick

The Unfiltered Truth

As our energetic bee friends ferry their highly coveted cargo of sweet nectar toward home, the transformation begins. Inside their tiny honey sacs, enzymes start the process of breaking down sugars as bees search for a cell to deposit their treasure deep inside the hive.



Let the evaporation procedure begin! With adequate evaporation provided by the constant fanning of wings, nectar will become honey-- the food of the gods and us mortals, too. Honey bees know when the water content of the nectar is 18-20% and begin sealing the cell with wax, completing this complex task; evidently those miniature refractometers the hive just purchased with built in easy-to-read digital readouts are incredibly accurate and quite handy!

Raw/unfiltered honey contains tiny bits of wax, bee pollen and a few other 'extras' gourmet consumers cherish. This honey is never heated, because, when the heat is on, it modifies the composition of vitamins and minerals, kills the enzymes and can alter its taste. Allergy sufferers have seen the 'unfiltered' light and seek it out from their local keepers. By the way, so many beekeepers filter, filter and filter their honey until it appears as if it came right off the super market store shelf; so why bother, what's unique about producing honey like that? One local fellow's huge filtering device looks more like a triple still than a simple filtration system.

When you filter everything out, especially pollen, there is no way to determine where honey comes from. Why are we always altering a God given food? For example: Salt. Table salt has the 84 life sustaining minerals removed from it and the remaining ingredients are heated until they become toxic. Raw milk is boiled to death and has the healthy CLA cancer fighting fat removed. Why do we believe heating, filtering and watering down honey is the right thing to do? I believe it's because processed foods' focus is on beautiful visuals despite their lack of nutritional value.

In case you don't get out much, a few years back China exported to us a quantity of a product without pollen. One report said that when tested, several major chain stores selling this product, found no pollen in their honey, so what was the origin of it? We agree in this case, with the Natural News, "Honey void of pollen is an artificial, nutrition-void, watered-down scam."

There are at least one thousand types of honey worldwide, while in the United States, there are over 300 unique varieties. One of your apiaries could have five hives and provide a harvest



of five different types of honey. Are you aware the honey on many grocery shelves is blended, watered down and filtered to crystal- clear clarity, so that REGARDLESS OF WHAT STORE YOU VISIT NATIONWIDE, IT ALL LOOKS AND TASTES THE SAME?

Beekeepers use a variety of filters. An 80 micron filter removes most particles in honey, and a 600 micron would leave things like granules or dust behind. In France regulations don't allow filtering honey more than 80 microns, this usually is adequate for most purposes. Many prefer the 200 micron filter.

Dark Manuka honey from New Zealand (which prides itself on being very organic) is packed with a multitude of medicinal antibacterial attributes (that are NOT filtered out!)



Nothing like a beautiful jar of honey.

In the United States, some of the darker medicinal honeys are the Southwest's tamarisk honey and California's eucalyptus honey, which usually are raw and unfiltered.

If you want a product that is in demand for its coming from a hive rather than a boiling and filtering factory, then do minimal filtering. People are becoming more aware that the less their food is 'processed', the better it is for them. Celebrate the incredible harvest of honey from your hives by keeping it in as natural state as possible, rather than emulating the grocery store honey look. Not only will you cultivate a following of grateful people, but you will show that what the bee produces does not need much intervention from man to be perfect.

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 Dennis Brown

Help, Dennis!

I'm a new beekeeper and I just installed two packages yesterday. Today, when I checked on my hives, one of the hives was empty except for the queen. She was still in the queen cage walking around. It looks like all the bees in that hive moved over to the other hive. What should I do? Can I take some of the bees out of the good hive and put them back with that queen? I'm confused. Pam Dawson



Hello, Pam,

Unfortunately, you have experienced something that has become more frequent over the past ten or so years. (The breeder may not have provided enough drones in their breeding yard. Sometimes the breeder will pull the queen out of the breeder box before checking her brood pattern or even giving the queen enough time to lay a brood pattern.) When a queen has mated, her body has a certain smell. It's called pheromones. To simplify, if the queen has mated properly, (she usually mates with ten or more drones before she takes over egg laying in a colony) her pheromone is strong to her workers. If she has not mated properly, her pheromone is weaker and the bees sense this. It seems that your one hive sensed that the queen had not mated properly so, they moved to the other hive where that queen had a strong pheromone. There was no brood or stores in that hive so; there was nothing there to keep those bees from moving.

If there had been brood present, the bees would have begun preparations to produce a new queen to take the place of that queen with a weak pheromone. It happens more than most folks realize in a hive. We don't usually notice it in a hive that has been around for a while because the bees stay and fix the problem themselves. You should always purchase queens that are marked so you can tell if the queen in your hive is the same one you installed. Then, if you spot a queen in your hive that is not marked, the hive has either swarmed or the bees requeened the hive themselves.

It wouldn't do any good to add bees back in with that queen. They would not stay. You should contact the queen breeder and tell him/her what happened. A good company would make things right.

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.



Accepting Orders Now!



Diversified Pollinators

Milkweed Butterflies of North America

Reprinted with permission from Xerces Society

While late-season ice storms seem to have cancelled spring in some parts of the U.S., the monarch butterflies know that the seasons are changing. Soon they will leave their winter roosts in the oyamel firs of Mexico and return to their breeding grounds, starting in Texas. As milkweed specialists -- while adults nectar on a variety of flowers, their larvae only eat plants in the genus *Asclepias* -- their future relies on finding milkweeds along the way.

But monarchs aren't the only milkweed butterfly. There are four butterflies that occur in North America and share the same reliance on milkweed for their caterpillars. One, the Caribbean queen (Danaus cleophile), can be found only on the islands of Hispaniola and Jamaica. The other three, the monarch (*Danaus plexippus*), queen (*Danaus gilippus*), and soldier (*Danaus eresimus*), are more widespread and will be encountered on the continental mainland. Monarchs can be found across much of North America, while queens have a more southern distribution. The queen's range starts in Central America and ends in the American southwest. The soldier butterfly's heartland is smaller, occupying northern Mexico and the subtropical U.S. It's possible to see all three species side by side in the southernmost parts of Texas and Florida, but even then, soldiers are the least common.

Because queens, soldiers, and monarchs are all very similar in appearance, it is important to be wise to their field markings before attempting to track them down. We have some tips to help you in your search.



Monarch Butterfly

Flashy and readily spotted, monarch butterflies can be found from South America to Canada, although in much smaller numbers recently due to habitat loss in much of North America. They are the only milkweed butterfly with a confirmed long-distance migration, and are much larger than both queens and soldiers. Easily distinguished by the combination of their size and bright orange coloration; black veins contrast boldly against orange on both upper and lower sides of their wings. http://www.xerces.org/monarchs/

Diversified Pollinators continued

Queen Butterfly

Queen butterflies are smaller, more brown than orange, and lack the contrasting black venation visible on monarchs' dorsal (top) side. They have two lines of white dots on the dorsal side of their forewing (leading wing), versus the single line observed in soldiers. Overall, their color is darker and duller than the monarch's. Queens are quite common in the parts of southern Texas visited by Xerces staff, and are much more frequently found than monarchs along the coast there. They are more of a southwestern species. http://www. butterfliesandmoths.org/species/Danaus-gilippus

Soldier Butterfly

Distinguishing between gueen and soldier butterflies is more difficult than separating the two from the monarch, their larger cousin. Soldier butterflies are encountered less frequently than the other two -- they are a veritable four-leaf clover in the field! Sometimes straying into southern Arizona, they primarily inhabit the subtropical areas of the U.S. and northern Mexico. They are differentiated from gueens by the single (rather than double) line of white dots on their forewings, and have a dusky, dark patch in the middle of their hindwing. Overall, soldiers are a rich shade of chestnut. http://www. butterfliesandmoths.org/species/Danaus-eresimus Good luck in your search for butterflies this spring, and keep your eyes peeled for monarchs as they spread northwards over the next few months.



Queen butterfly. Credit: Queerbubbles, Wikipedia



Soldier butterfly. Credit: Korall, Wikipedia

The Milkweeds You Never Knew

The monarch butterfly has flown into the national spotlight, and it's brought milkweeds (*Asclepias spp.*) along with it. Because they are the host plants for monarch caterpillars, the butterfly's survival depends upon an abundance of milkweeds in the landscape. With countless native plant species under threat from habitat loss and in need of conservation attention, will the public's love of monarchs be enough to save milkweeds, too?

Though milkweeds are sometimes maligned and misunderstood, they are currently some of the most

Diversified Pollinators continued

sought-after plants in the country, in large part because their protection and restoration is essential for the future of the North American monarch migration. Despite being saddled with a common name that suggests they are a nuisance, milkweeds are a diverse group of native wildflowers — over 70 species are native to the United States! — that grow in a variety of habitats including deserts, prairies, woodlands, and wetlands.

Seeds and plants are widely available for the four most familiar and broadly distributed: butterfly (*A. tuberosa*), common (*A. syriaca*), showy (*A. speciosa*), and swamp (*A. incarnata*) milkweeds. Here, we'd like to introduce you to a few lesser-known species, for which seeds and plants are becoming increasingly obtainable. These may not be suited for your home region, but if you do live within their natural range, please consider using them to create monarch habitat — or to diversify the one you've already planted!

Heartleaf milkweed (A. cordifolia)

This native of foothill and lower montane habitats has heart-shaped leaves with a bluish cast and is topped by delicate clusters of deep pink, whiteaccented flowers. It prefers dry, rocky soils and thrives on slopes and hillsides. Range: Southern Oregon, northern and central California.

Rush milkweed (A. subulata)

A nearly leafless, desert-adapted species with gray-green photosynthetic stems and waxy, cream-colored flowers. It is an excellent choice for low-water-use gardens. Transplants are currently more widely available than seeds; please see this nursery list compiled by the Southwest Monarch Study. Range: Southeastern CA, southern Nevada, southern Arizona.

Short green milkweed (A. viridiflora)

A short-statured prairie species with broad, wavy leaves and robust clusters of small green flowers that are distinctively different from most milkweeds. It prefers sandy or rocky soils. Range: Central and eastern U.S.

Prairie milkweed (A. sullivantii)

This sturdy prairie native with large, bright pink flowers resembles common and showy milkweed in stature but has hairless leaves, stems, and fruits. Its leaves often grow upward at a sharp angle. It does well in sandy, loamy, or rocky soils. Range: Central Midwest.

To find sources of milkweed seed or plants, please use our Milkweed Seed Finder or contact native plant nurseries in your area. If these four species are not native to your area, find out which species are by consulting these range maps from the Biota of North America Program. Visit xerces.org.



Heartleaf milkweed



Rush milkweed



Short green milkweed



Prairie milkweed

Apitherapy

Charles Mraz Apitherapy Course & Conference May 15-17, 2015 - Flushing, NY

Save the Date! May 15-17, 2015. Join us at our annual Charles Mraz Apitherapy Course and Conference Sheraton LaGuardia East Hotel 135-20 39th Avenue Flushing, NY 11354 718-460-6666

The American Apitherapy Society proudly announces its 19th annual Charles Mraz Apitherapy Course & Conference to be held in the heart of Flushing, New York conveniently located only three miles from New York's LaGuardia airport, ten miles from New York's John F. Kennedy International Airport, and approximately 12 miles from Manhattan, New York City. This location is also easily accessed by the Long Island Railroad and the NY Subway system making a trip into Manhattan a breeze.

Medical doctors, a spectrum of Holistic Health Practitioners, Veterinarians, Researchers, Backyard Beekeepers, and members of the general public interested in self-reliant health care will convene from all over the United States and the world to learn about Apitherapy. Apitherapy, an ancient healing modality, refers to the therapeutic use of products from the beehive including honey, pollen, royal jelly, propolis, and bee venom therapy.

Attendees will be educated in the therapeutic properties of each of the hive products including a hands on bee venom therapy session where participants will obtain practical experience and learn to be self reliant with this amazing healing practice. Presentations are given by the CMACC faculty and guest speakers who are some of the most prominent and experienced Apitherapists in the world. Examples of material covered in these presentations are allergic reactions, techniques of BVT, informed consent and legal issues, propolis and its many uses, veterinary apitherapy, wound healing, and much more. The preliminary program detailing material to be presented will be posted on the website shortly. Back by popular demand, we will be offering two levels of the course offering basic information to those new to Apitherapy and more advanced information to those already experienced with Apitherapy. This year we will also be offering for the very first time a special 3 hour practical workshop on Sunday afternoon for those wanting to leave with more practical experience than ever before! Certificates of completion will be available to all participants.

The AAS is a nonprofit membership organization established primarily for the purpose of education in the advancement of Apitherapy. CMACC has been named in memory of Charles Mraz, an American pioneer in the use of bee venom to treat many health issues and conditions.

Event registration will open on March 1, 2015 at www.apitherapy.org where, with a single click, you can access all CMACC information, register and pay online. Don't miss out on the EARLY BEE DISCOUNT by making sure you register by Tuesday March 31, 2015. Hotels can be booked separately by using the hotel link on the website. Take advantage of special room rates only available until April 1, 2015 at the host hotel and April 30, 2015 at another hotel by booking your room early. If you choose not to stay at the host hotel, a list of nearby hotels has been provided and all of them offer free transportation to and from NY LaGuardia Airport. Join us for the Friday night dinner reception to socialize and relax with others while enjoying Asian cuisine at a nearby restaurant. A one year membership or renewal with AAS valued at \$50.00 is included with the course fee. Looking forward to seeing you there!

Bee Thinking About Seeds of Growth: The Birth of Agrilicious!

Welcome to the launch of Agrilicious. My team and I are very excited to have reached this day, and we're equally pleased that you can join us in this important undertaking. Our hope over the next several weeks, months, and years is that we'll all look back on this as the beginning of a fulfilling and beneficial relationship.

I'm Duane, co-founder, tour guide, blog poster, and sounding board. Let me borrow a few moments of your valuable time so you'll understand a bit about who we are, why we're here, and what you'll find on the inviting road to Agrilicious.

Our aim is to create something in Agrilicious that you'll find worthy of visiting, again and again, so that, before you know it, you'll have the urge to deepen your engagement while benefitting from the local food experience-while, together with the Agrilicious team, helping to grow the family-and-farmer community connection.

Agrilicious is a Social Purpose Corporation. Our mission is to promote the positive short and longterm benefits of local and organically grown foods, along with the benefits of family farming and sustainable agriculture. We'll track down the experts to provide the latest and best information in and around the food movement, while putting you in a position to make sound choices based on transparency and facts. As a general rule, we are not bomb-throwers or wild-eyed revolutionaries. The team and I are not interested in promoting squabbling politicians who tend more to make speeches than actually get anything done, and we certainly have no interest in telling you how to eat, what to eat, or when to eat it. We are here to present you with the information in an informative, fair and concise manner so you can make sound decisions without having to sort through generalities. We believe by simply raising your awareness, you will find yourself, as I find myself, consistently asking where does my food come from, why isn't it grown locally, or what's in this dish I'm eating. Like many of you, I want to be healthier. I really do. I want better health for myself, better health for my family,

my friends- and yes, better health for you. However, full disclosure, I don't always make good food decisions. I'm not a vegan nor vegetarian. I'm 100% carnivore who loves a good gut bomb (i.e. hamburger) as much as a good bottle of red. Worse, I certainly have my own weaknesses and cravings. Whether



they might lead me to a Gene and Jude's Hot Dog or a Zeek's Thai-One-On pizza, I am now able to at least convince myself that if I am aware of my food choices, I will be better equipped to make smarter and healthier food decisions more often. By doing so - I put myself in a position where I can give into my impulses periodically (vs. routinely) without completely derailing my good intentions! Well...it makes sense to me anyway.

Any-hoo...the plan here is to introduce you to the best local farmers, food hubs, food delivery companies, restaurants (focused on locally sourced menus), and leading suppliers of products and services that support local farmers. We will work to provide family farmers a larger stage - in front of a highly motivated audience that craves farm fresh food in their communities. We will develop simple to use feature and functionality to make accessing local food and farmers accessible and seamless for all, while leveraging data and technology to present the very best the marketplace has to offer, including accessing the best recipes, menus and much more!

Agrilicious is INCLUSIVE. We're putting up a big tent here. We do recognize this is a new and different approach – and if the length of this blog is any indicator – I'm hoping we will learn to explain it all in a more succinct manner. It is time for the mainstreaming of the food movement. Young and old, we need the curious, the foodies, the farmers, and the Locavores. We crave innovation – new ideas, never say die entrepreneurs, new farmers, and new technologies. The success of one partner, one farmer, one food delivery company or one website will help the many. We are in fact – all in this together. Agrilicious is about creating a sustainable network of credible businesses and partners within the food movement chain who are qualified to meet the demands of informed customers who are tired of being told that all of the so-called natural products (with labels reading like a chemistry set) are supposedly good for them. This effort is about getting all of the players in the food production and distribution cycle on the same page and at the same table, from the farmer to the produce delivery company working with the farmer-to the service providers, suppliers, restaurants, and grocery stores that support and feature local farmers—and to the meal-kit services, distributers, educators, and food industry advocates and experts. For a sustainable network to be successful – it takes work – and yes – it must be sustained.

Back in the day, growing food was something that involved the participation of most Americans, and the connection between farmers and individuals was a critical part of daily life. Our task is to help restore that connection. As much as I wish I could be a farmer, I simply don't have the knowledge, the skill-set, or the resourcefulness. I wish I did but honestly I can't fix a running toilet. Where we can contribute is through technology, creativity, my team, our relationships, community outreach, and business competence with relevant partners with significant reach. This talent is an ingredient we can leverage to help all of those who came before us and those who are on the front lines today to contribute to the restoration of the food cycle connections and the advancement of the food movement – and to take our food economy back. Now is the moment for a little clarity on the subject of locally grown food. Factory farming has driven many good farmers - our neighbors, off their land. This in turn paved the way for the development of artificial fertilizers, overused and

noxious pesticides, the genetic engineering of seeds that would repel insects, and the genetic manipulation of produce to achieve longer shelf life. All of this tinkering with nature has led to an increase in hospitalizations as a result of food allergies, and has even led to a reduction in the varieties of produce. To us, it doesn't make sense.

Backstory: During my early years in Escondido, CA, I was a typical kid with no farm connection whatsoever. Every day, the seven kids in our family sat down promptly to dinner at 6:00 P.M., and none of us ever wanted to sit on the left side of Dad, who was the first to fill up his plate before passing it on to the right. My food choices away from the dinner table included beef and bean burritos from vending machines at Orange Glen High School and cheeseburgers and chili fries from Char Burger across from the ball field. Farming? I didn't know the difference between a parsnip and a turnip. Later I grew into the standard model of an adult American male with a generous helping of Yankee drive and ambition. I stumbled along the way, mightily in fact, but learned through hard work, perseverance, those occasional life kicking you in the behind moments and, by surrounding myself with a good team – we could pull off just about anything. With the right people and support around you, at work or at home, success is possible. So behold, one day twelve years ago, I woke up to find myself a frog prince. I had managed to lead a team of talented Internet misfits to the ultimate success. What a country.

Fast forward to 2013; my boys are ten and sixteen years old. Life seems to be moving far too fast. Between the vines, tweets, secrets and snapchats - I can't keep up with the electronic worlds they inhabit. Their devotion to their devices and the latest video games and apps is endless – but I count myself lucky, they are great boys in large part because they have a great Mom. I worry about their health and the ready availability of fast-food and unhealthy snacks, about irresponsible marketers and advertisers who invent jingles and jargon to convince us that unhealthy practices like chemically spraying food increases crop yield, makes the food cheaper, and makes it good for you. I'm worried that the former backbone of the food production cycle, the American farmer, is being squeezed out as an unnecessary element in the equation. I'm worried that we've stopped asking questions like—what's is in this food product? Where is it from? Who grew it? Are these Cheeto-looking things really All-Natural and good for me?!?

February 3, 2013, Super Bowl Sunday. I do love a good commercial, but it's hard to believe that a Dodge Truck Commercial provided one of the seeds that would grow into Agrilicious. It really did; it was a commercial about farmers, a commercial in praise of the land, family farms, faith, and hard work. The powerful message featured appealing farm scenes with narration by the late, great Paul Harvey who was describing God's reaction when he looked down at his creation. God decided that what this bountiful land needed was a caretaker. He created a farmer—a hardworking, dedicated family man or woman, a steward of the land, the animals, and the produce raised on that land. I was hooked.

That spring after considerable nudging from Cindy the co-founder of Agrilicious, much of my time

was filled with reading Mother Earth News, learning more about Joel Salatin and his Polyface Farm, the Food Tank initiative and other groups out there doing terrific work. I was thirsty for information and was surprised that, in spite of the size of the food movement and its relevance to all of us, every single one of us, the amount of information and access to family farmers online was still very limited.

During mid-afternoon on the 20th of May, a powerful tornado, a mile and a half wide and with winds exceeding two hundred miles per hour within the swirling storm system, leveled sections of Moore, OK. When I arrived in Moore, I wanted to help – I had no idea what to expect. My hands were soft, my boots and gloves were new, shiny and clean thanks to Amazon Prime. I had nothing more to provide than a strong back, a firm handshake, and a receptive ear. Nervously approaching the community center where volunteers gathered each morning - I felt that I stood out like a sore thumb, yet, I received the same appreciative welcome that was given to the more capable rescue workers. I teamed up with an Army ROTC group Cameron Comanche Battalion from Lawton, Oklahoma, a young couple from Atlanta, a Dad and daughter from Oregon and a local named Serenity - who had come home from Ft. Worth in her community's time of need. Being with the volunteers and working with and for the victims of the tornado was both emotional and inspirational. I've not worn the boots since Moore - yet seeing them in the garage with my gloves stuffed in them gives me sense of connection to the good people of Oklahoma.

End of summer - I spent a long holiday weekend on a mini road trip touring lowa and Illinois. I spoke to family farmers, visited the University of Iowa, Iowa State University, numerous restaurateurs, and even a great small winery in Madison County, the Covered Bridges Winery.

Standing in a corn field near the intersection of Francesca Ave and Roseman Bridge Rd, (yes, it's true!) the wind whistling through the field, the scents of the field intoxicating as I took a deep breath and soaked it all in. That moment was every bit as spiritual as if I had been reverently sitting in St. Patrick's Cathedral in New York. I can't explain the feeling. It was certainly new and overwhelming to me – and I liked it.

I returned from lowa focused and intent on putting pieces of the band back together, one by one, the members of my team, some who have been with me for more than twenty years were back on board and ready for our next adventure.

After a long grueling work filled (wet) Seattle winter, Spring has now sprung and Agrilicious is here. What is it? What has the team created? Well, honestly, it's a little bit of everything. We aim to be at the heart of the food movement providing an exciting way to participate in the local food experience while expanding the family-and-farmer connection. The go-to source for all things local food. We believe if we do this correctly – together - we can make a difference in these important ways:

Awareness: Be better prepared, through an understanding of the issues. Action: Shape the food industry, by choosing locally sourced food. Advance: The cause, by seeking out direct to farmer connections.

Your role here will be critical, I encourage you to get involved. If you're the sharing type – share the names of the organizations you respect and follow – we'll promote them. Tell us your story, or, about your local farm heroes, perhaps about your family farm. We will benefit when we share these stories and celebrate the lives of our local food and farm heroes, past and present – all over this great country.

We'll have some fun along the way - we'll raise awareness, support our communities, we'll enjoy better tasting food, share new recipes and we'll be healthier for it. We'll work to hold our big chain grocers and restaurants accountable to our local community and farmers. We'll pull in some guest bloggers, seek out the experts and we'll work diligently to gain the support of quality centric like-minded partners who will help us contribute to this movement – and to grow Agrilicious.

So...let it be so - we're off and running. This is only the beginning. If you think we're on the right track, please tell your friends, co-workers, and family. Get signed up...follow us on Twitter - If you can help in any way, please reach out to me.

Here to help. Duane





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Agrilicious is a social purpose corporation created by successful Internet experts – looking to give back and support the local food movement so we can all change our food economy. Please take a moment and check us out - you won't be disappointed.

To Visit the Home Page - Go Here: http://www.agrilicious.org To Go Direct to Get Your Free Listing (Sign-Up) http://www.agrilicious.org/join-the-food-movement We are here to help you.

Agrilicious is brought to you by a Social Purpose Corporation, based in Bothell, Washington.

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Bee Thinking About Apimondia USA Bid for 2019 by Rachel Bryson

What is Apimondia?

Apimondia is an exciting, dynamic, diverse meeting of the world beekeeping industry. It is the biannual congress of the International Federation of Beekeepers' Associations. The federation was founded in 1949 and has a mission of promoting the scientific, technical, ecological, social and economic apiculture development in all countries.

One of Apimondia's main objectives is to provide a meeting for exchanging information and engaging in discussions between beekeepers, scientists, honey producers, government agencies, technicians and those working for apiculture development. Apimondia tours also give attendees an opportunity to see first-hand how the host country keeps bees.

Throughout the United States, a small, dedicated group of beekeepers has been planning, studying and gathering resources to host Apimondia, the world beekeeping congress. Since 2012, this group has worked tirelessly on the bidding process. Now, the time has come to put our best foot forward in inviting the international beekeeping community to be our guest, and select the United States to host Apimondia 2019.

Our Goal

The most obvious goal of the Apimondia USA committee is to win the bid to host the world beekeeping congress during the summer of 2019 in Minneapolis, Minnesota.

"Our team has been working on this process for more than two years," said Debbie Seib, chair of the Apimondia USA 2019 bid committee. "This is a huge undertaking, but also an enormous opportunity for the United States' beekeepers. The international community has often wondered how we keep bees. Not only could hosting Apimondia 2019 be a way to show beekeepers around the world beekeeping in the United States, but it could potentially open doors to start an international dialogue regarding honey bee management."

The committee's mission is to "bring the global beekeeping community together for mutually beneficial discussions, collaboration and education." This congress will provide a meeting point for everyone involved in the beekeeping world - beekeepers, scientists, honey packers, development workers, and those who work in the equipment industries - to come together and exchange ideas, while learning from world renowned researchers on the latest in honey bee study.

"From Africa to Alaska, from Russia to Rhode Island, beekeepers across the globe face similar issues," Seib said. "And while we may differ in how we raise or manage our bees, we all have one thing in common - love of the honey bee."

Why?

Supporting the Apimondia USA 2019 bid goes far deeper than just writing a check or helping to spread

the word (though both of these efforts are very appreciated).

"I see Apimondia as giving some of the highest opportunities to further my knowledge of beekeeping," said Benton Kastman of Texas, who is a member of the committee. "Apimondia in the USA, would help strengthen our networking ability with beekeeping industries and beekeepers from around the world. This will also help strengthen our industry globally."

Louisa Hooven, 'Scientific Committee Chairman of the committee, adds that many issues, including colony loss, pesticides, global honey markets and the movements of pest and pathogens, are all concerns for today's beekeeper.

"These are issues that directly impact US beekeepers. And they are issues that most definitely spill across international borders," Hooven said.

Beekeepers and researchers from the United States have attended the Apimondia meetings in the past; however, our numbers are typically very small.

"When so much is at stake for pollinators, it is critical that the US beekeeping and bee research community fully engage in this international dialogue," Hooven said. "We have a lot to share with the world, and a lot to learn from them. This is our chance to take an international role in pollinator issues."

She added "The media attention that is expected to result from holding this congress will help the beekeeping community reiterate that problems in US apiaries have national and global impacts on agricultural and economic systems. This will help beekeepers to be heard loud and clear by our own policy makers as well."

This coverage and our public outreach is also likely to inspire many Americans to learn more about beekeeping as a science. We expect this meeting to result in increased interest in membership in beekeeping clubs and organizations.

Your Role

The United States has the unparalleled opportunity to bring the worldwide beekeeping community to our back yard. Winning the bid for the Apimondia Worldwide Beekeeping Congress in 2019 is the perfect way to showcase our industry as never before. Representatives from our chosen host city, Minneapolis, will join the United States delegation in Daejeon, South Korea, this September to invite the world beekeeping community to the United States for Apimondia 2019.

"But we can't do it alone," said Seib. "All of us will have to come together to make this bid successful." From volunteering to work on a committee, to making a financial contribution, any and all means of support are welcome.

The United States last hosted the Apimondia Worldwide Beekeeping Congress XXI in Maryland in 1967. Bringing the worldwide beekeeping community back to the USA for Apimondia XLVI in 2019 can only become a reality with your help. To find out more on how you can contribute to the Apimondia USA 2019 bid, visit our website.

The Best of the Best

Plans are well underway for the proposed Apimondia USA 2019 program, which includes educational lectures, tours, the world's largest beekeeping trade show and the world honey show.

The Scientific Program is engineered not only to provide forums for experts to share knowledge, but also to create opportunities for beekeepers from around the world to meet and exchange ideas, and return home with satisfying and unique memories.

"We are creating a program that's not just focused on sitting through one lecture after another," said Hooven. "Our program will use various types of educational sessions, from scientific poster sessions to round tables to lunches with the experts."

The program will use diverse approaches to engage attendees with internationally renowned experts and researchers, while still allowing for plenty of small group discussions.

"It's the small group or one-on-one discussions we as beekeepers have which are sometimes the most educational," Seib said. "You can't place a value on these conversations. Just imaging the value of conversations you have with your own local beekeeping group, then multiply that to a global scale. That's the kind of information exchange we're talking about."

Plans are still under development, but the program will feature:

- Symposiums, platforms, plenaries and keynote speakers.
- Lunch events to facilitate small groups to interact with speakers and experts.

• Roundtables, fishbowls and chat shows that encourage experts to interact with attendees on hot topics.

- Poster sessions to allow attendees to talk in person with presenters.
- Knowledge fairs to demonstrate new ideas, products, and methods.
- Hands-on workshops.

One highlight of the program is the opportunity to visit the University of Minnesota, which has maintained an internationally recognized research, teaching and outreach program on honey bees since 1918.

The University of Minnesota is located in the heart of the top honey-producing region of the United States. Its honey bee program is currently expanding with the creation of a Bee and Pollinator Research Lab and a Bee and Pollinator Discovery Center at the University of Minnesota Landscape Arboretum.

Plans are also underway to open portions of the congress to the public, following the vision of Apimondia USA 2019 to "advance the education and knowledge of beekeeping."

These public sessions may include demonstrations of beekeeping around the world; youth beekeeping educational workshops; touring bee friendly gardens; and a Master Beekeeping program.

Host City

Careful consideration, including months of potential location site visits, was conducted before one city rose to the top – Minneapolis. This city of nature where history, art, culture and beauty come together to form a mix that can't just be seen – it has to be experienced. Though filled with world-class museums, theaters, breathtaking architecture and a focus on outdoor activities, Minneapolis also falls in the heartland of the United States and the heartland of its beekeeping operations. Commercial beekeepers travel to Minnesota each year to process their honey production and prepare thousands of colonies for transportation across the United States.

The Minneapolis Convention Center is well equipped to service groups from 30 to more than 10,000. The center is one the most energy efficient and "green" friendly centers in the world. Filled with the latest technological tools, it has a 3,400 fixed-seat auditorium, 475,000 square feet of exhibit space, 87 meeting rooms and both a 28,000-square-foot ballroom and a 55,000-square-foot ballroom.

The center includes a unique auditorium, exceptional production capabilities and many special features, including a UPS Store, Visitor Information Center and Dunn Bros. Coffee. It is conveniently located just 20 minutes from the Minneapolis International Airport. The unique use of climate-controlled skywalks connects the center to 5,000 of the 6,000 downtown hotel rooms, countless dining options and other attractions.

"After touring the convention center and seeing first-hand the capabilities of this facility, there was no doubt in our minds that Minneapolis was the best city to host Apimondia 2019," Seib said.

About the Committee

The Apimondia USA 2019 committee is comprised of beekeepers, business professionals and government leaders from across the United States. The committee includes five sub-committees – finance, site, scientific program, bid materials and marketing. The members of these committees each work toward the common goal of seeing the United States selected to host Apimondia 2019.

On the Web

http://www. apimondiausabidfor2019.org https://www.facebook.com/ USABidforApimondiain2019 https://www.pinterest.com/ apiusabid2019/



Apimondia in Montpelier, France.

JOHN PHIPPS, U.S. FARM REPORT COMMENTATOR, TO KEYNOTE INAUGURAL QUAD CITIES POLLINATOR CONFERENCE

Registration is now open for the inaugural Quad Cities Pollinator Conference, June 10-11, 2015 at Jumer's Casino and Hotel in Rock Island, IL. This two-day event features a keynote dinner by John Phipps, commentator for U.S. Farm Report, titled, "Shades of Grey: Communicating Science to an Anxious Public." With insights from his farm to the TV studio, Phipps will share experiences and working rules for explaining probabilistic technical information to audiences craving black and white answers.

Throughout the two days, participants will also attend a variety of educational sessions from experts, such as May Berenbaum, Ph.D, Department of Entomology, University of Illinois, on: plant-pollinator relationships, pollinator decline, designing pollinator support plantings, conservation measures, pollinator-friendly landscapes in agricultural and urban settings, and more. In addition, individuals can attend an optional off-site workshop and tours.

This conference is geared toward: the agricultural community; municipal, state and federal government employees; landowners; homeowners; beekeepers; and educators. The conference will provide a platform for knowledge-sharing, open dialogue, networking, and pollinator-related goods and services.

Pollinators are a critical natural resource in agriculture and healthy ecosystems, but there has been a significant pollinator decline over the past few decades. Of the 100 crops that make up 90% of the global food supply, 71 are dependent on bees. Although our main cash crops are self-pollinating, insects do pollinate both plants and may be more important than historically thought. Honey bee pollination alone adds more than \$15 billion in value to agricultural crops each year in the United States.

Pre-registration for the event is required. Exhibitor space & sponsorships are available. For registration and information, visit www.qcpollinatorconference.org or call Nahant Marsh at (563) 323-5196.

The conference is sponsored by: Nahant Marsh; U.S. Fish & Wildlife Service; Soil & Water Conservation Districts of Rock Island, Scott and Henry counties; Rock Island County Farm Bureau, Scott County Farm Bureau, The Singh Family Charitable Giving Fund, Wallace's Garden Center, Waste Commission of Scott County and Radish magazine.





Beekeeping 'Round the Globe Apiculture in Ontario – For EAS by Paul Kozak

Beekeeping is practiced in most regions and counties of Ontario. This covers many diverse landscapes in a very large province. The geography of Ontario bears mentioning as Ontario borders Minnesota to the west, eastern Michigan, western New York State, Quebec to the east and the northern reaches of Ontario cover James Bay in the Arctic. Honey bees are kept in landscapes as diverse as farmlands of grain, oilseeds, orchards or dairy interspersed with the northern limits of the Carolinian forest, mixed maple and boreal forest. Many of the honey bee colonies in Ontario are located in southern Ontario, particularly in the milder climate of the Niagara Peninsula, the prime fruit growing, and more recently wine producing, region of Ontario.

There are approximately 112,000 registered honey bee colonies and approximately 7,000 bee yards in Ontario as of late 2014. Most of the honey bee colonies (~80%) are managed by commercial beekeepers. Non-commercial beekeepers are also very important. The Ontario Beekeepers Association and the approximately 26 local beekeeping associations throughout the province work with all sizes of beekeeping operations on issues that impact them.

Beekeeping Activities in Ontario:

Beekeepers in Ontario are relatively diversified, producing a substantial honey crop, providing domestic and export pollination services, and producing locally raised queens and colonies in a northern climate.

Honey Production: Honey bee colonies in Ontario are capable of producing 75 to 100 lbs, or more, per colony in a single year. Production varies by region, specific yard location and weather. Although honey production in Ontario is less per colony than the prairie provinces (AB, SK and MB), there are regions of Ontario that can yield large honey crops. As well, since there are a large number of beekeepers, a large number of colonies and many beekeepers marketing directly to a large urban population, honey production in Ontario is valued more, per unit production, than many other provinces.

Pollination Services: Honey bee colonies in Ontario are often used for pollination of Ontario fruit (apples, cherries, blueberries, watermelon, etc.), vegetables (pumpkins, squash, field cucumbers, etc.), and oilseeds (canola). Honey bee colonies are moved in large numbers (~30,000 colonies in 2014) in spring to pollinate the large blueberry and cranberry crops in eastern Canada (Quebec, New Brunswick, Nova Scotia and Prince Edward Island).

Production of honey bees: Beekeepers produce and sell honey bee colonies, nucleus colonies or honey bee queens to other beekeepers within Ontario, or to other provinces and states. There are Ontario bee breeders that have been able to market their stock to beekeepers throughout the United States, particularly certified Buckfast stock that has been imported to Ontario since 1990. In addition to Buckfast, many beekeepers have been selecting their own local stock. Ontario has always been a leader

'Round the Globe continued

in the selection and breeding of honey bees, especially with the Ontario Bee Breeding Association and the hygienic testing that beekeepers collaborate on under the Ontario Beekeepers Association's Technology Transfer Program. Ontario has a limited production season for queens, compared to the southern U.S., but Ontario beekeepers have adapted a successful model for the production of queens and colonies in northern climates.

Annual Statistics on Ontario Beekeeping:

- \$26 million in value of honey
- \$395 million in pollination value to Ontario agriculture (with an estimated additional \$70 million to agriculture outside of Ontario)
- Ontario has a significant proportion of honey bees in Canada (2nd highest by number of hives per province) and the highest number of colonies in eastern Canada.
- Ontario honey bees provide a large proportion of the pollination services in eastern Canada
- Ontario has more beekeepers than any other province with almost half of the registered beekeepers in Canada (3,200 / 7,000 = 46% of all beekeepers)

Legislation and the Apiary Program:

Beekeeping in Ontario is governed under the Bees Act, which covers the rights and responsibilities of beekeepers, and addresses the issue of bee health, particularly pests and diseases. The Apiary Program under the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) includes a staff Provincial Apiarist and approximately 18 Apiary Inspectors. Apiary Inspectors inspect honey bee colonies for pests and diseases, and monitor for issues of honey bee health such as new and emerging pests and suspected pesticide incidents. Monitoring is done through taking samples, and working closely with federal and provincial counterparts and labs to detect honey bee pathogens and pesticide residues. Apiary Inspectors conduct anywhere from 1,000 to 1,400 inspections a year throughout Ontario. Apiary Inspectors also provide advisory and extension services to beekeepers on honey bee health and best management practices. The Provincial Apiarist works closely with the beekeeping industry, related industries, researchers and other areas of government to address issues related to beekeeping and honey bee health, and to provide technical advice.



Hives adapted to northern climates in Ontario.

'Round the Globe continued

Pests and diseases: Ontario has been proactive at addressing pest and disease issues in honey bees with a suite of options and a proactive Integrated Pest Management approach that has been adopted broadly across the commercial sector. Monitoring for varroa levels is promoted along with established treatment thresholds developed by Dr. Ernesto Guzman (University of Guelph) and Les Eccles (Technology Transfer Program, Ontario Beekeepers Association). Applied research is a priority for Ontario and researchers and specialists are focused on developing new methods of varroa control, getting data to demonstrate that treatments are effective under local conditions.

2014 Ontario Treatment Recommendations for Honey Bee Disease and Mite Control Link: www.omafra.gov.on.ca/english/food/

inspection/bees/2014-treatment.htm

An Introduction to Honey Bee Pests and Diseases in Ontario



Link: www.omafra.gov.on.ca/english/food/inspection/bees/intro-bee-pests.htm

In recent years Ontario has had atypical honey bee losses over winter and acute bee mortality incidents during the beekeeping season. The province recently announced a multi-pronged Pollinator Health Strategy that will help strengthen pollinator health. The province of Ontario recognizes there are several factors that can impact pollinator health, and will look for ways to address them as the provincial strategy is developed:

A) Pollinator Habitat and Nutrition B) Pesticide Exposure C) Diseases, Pests and Genetics D) Climate Change and Weather

Paul Kozak, Provincial Apiarist, Ministry of Agriculture Food and Rural Affairs, Animal Health and Welfare Branch, Ontario, Canada.

Throughout December and January, public consultations were held to seek comment on components of the initial proposed pollinator health strategy. Comments received will be considered as we move forward.

Public Consultation – Pollinator Health

Link: www.omafra.gov.on.ca/english/pollinator/meeting-reg.htm

There is a lot going on in Ontario with honey bees with many positive initiatives. I hope to see you in 2015.





Speakers

Mark Winston, Robert E. Page Jr., Dewey Caron, Phil Craft, Robert Currie, Keith DelaPlane, Ernesto Guzman, Pierre Giovenazzo, Tammy Horn, Zachary Huang, Greg Hunt, Doug McRory, Heather Mattila, Medhat Nasr, Gard Otis, Steve Pernal, Nigel Raine and many more!

Workshops

Queen rearing, Integrated Pest Management, mead and beer making, how to win at honey competitions, beginner, intermediate and advanced beekeeping

Technical Tour

Full day bus tour featuring Niagara Butterfly Conservatory, Rosewood Estates winery and meadery, two of Ontario's largest commercial apiaries and a BBQ with queen auction and live entertainment

Register at www.easternapiculture.org Mail in registration is now open, online registration will open early April

Bee Arts Wild Honey Wine by Iver Marjerison

There is nothing quite like cracking open a bottle of your own wild fermented honey wine- traditionally called mead. The crisp flavors, the tingling mouth feel, and the unparalleled satisfaction of successfully joining forces with wild yeast organisms.

Alright, so that last part might have thrown you off a bit.

Let me explain... yeast is a living microorganism that is found in all sorts of places including in soil and water, as well as on the surfaces of plants, fruits, animals, and even humans.

This means that it is quite easy to get a hold of wild yeast, should you require their services, but what exactly would we stand to gain from teaming up with these microscopic critters?

Well, there are several things like pharmaceutical applications and leavening bread but, in this case, we are talking about their ability to produce alcohol.

To put it simply, yeast eats sugar and as a byproduct creates alcohol and carbon dioxide; the latter responsible for the carbonated effervescence that these drinks often have and the former giving adult beverages their desired effects.

How-to

The equation for fermenting your own alcoholic beverages at home is as simple as this



In this case the sugary liquid is a mixture of honey and water. The yeast is naturally found in the honey, on the skins of the raisins, and in the form of wild airborne yeast. The time table for this is about a month total, but can be aged longer for deeper flavors.





Bee Arts continued

Step by Step

1. In a large wide mouth vessel add water and raw honey at a 4:1 ratio. I did a gallon - 4 cups honey and 12 cups water.

2. Add a handful of organic raisins and stir until dissolved. The raisins are not required, but help add additional yeast.

3. Cover with a breathable material and let sit at room temperature away from direct sunlight.

4. Stir! stir! stir! stir! As often as you think about it, but at least a 2 times a day.

5. Repeat step 4 until your surface is covered in bubbles. This usually occurs between 4-6 days, but varies based on temperature and ingredients.





6. Strain out raisins and pour liquid into a narrow necked container. I use glass apple juice jugs.

Bee Arts continued

7. Fix airlock and let sit at room temperature for 2-3 weeks. I use a \$2 airlock from my local home brewery store. If you don't have access to an airlock you can put a balloon over the top and periodically loosen it to release built up pressure. The idea is that the yeast will be producing carbon dioxide, if it is unable to escape from the bottle, pressure will build up leading to an explosion. The airlock/balloon also keep out unwanted contaminants and insects.

8. Bottle and enjoy!

After the first couple weeks fermentation will slow down, at this point I like to start giving my jug a good swirl every day to aerate the yeast to help them push a little further. Once the airlock is no longer releasing bubbles or the balloon is no longer filling up, transfer the mead into individual airtight bottles and start drinking it!

*Be sure fermentation is complete before transferring to bottles or Co2 build up could result in bottle explosions.

Note: At this point many recipes call for bottling and aging the mead, however this recipe is for a sweeter "young" mead that does not require any long term aging.







Easy As That!

Bee Arts continued

Get Creative

The above recipe is the bare bones version of mead, which is a good starting point. However, the real beauty of the mead world is in the infinite amount of potential flavor varieties that you can create. Simply infuse combinations of dried/fresh fruits, herbs, or spices in during Step 1, and strain it out in Step 6. A couple handfuls of fresh berries is an awesome way to add a flavor kick to the traditional version.

FAQ

Will any water work?

Technically, yes. I have fermented with all types of water including basic tap and never had any problems. With that being said, if you live in an area with heavily chlorinated municipal water it may be best to opt for a different option. It is also not recommended to use distilled water as it lacks minerals needed for healthy fermentation. Ideally, you would use purified spring water.

Will any honey work?

Technically, yes. In this case there are several variables to consider. If you are able to get raw unprocessed honey that means that it has not been heat treated, this honey will contain a healthy quantity of wild yeast. However, if you are only able to get processed honey, you should assume that the yeast has been killed off and ensure that you use raisins or other fruits (skin on!) to get yeast into the mixture.

Do I need an airlock?

An airlock is not required, but is very useful and quite cheap. If you don't have access, the balloon method mentioned above is a perfectly acceptable alternative. The most important thing is to allow carbon dioxide to release from the container, while keeping contaminants out.

What is the alcohol percentage?

This varies from batch to batch depending on the honey, fruit, and more specifically the yeast. With this type of fermentation you are using wild yeast strains, these strains may be vigorous and robust or quite wimpy. You could pick up a hydrometer if you want to measure your batch.

lver is a 23 year old food enthusiast with an appreciation for the farm and fascination for the fork, writer on all topics of life, and blogger on all topics of food. He is currently pursuing his MBA in Food System Management. His passion for food began while doing research on a bee farmin Jamaica, this experience brough thim closer to food systems, and opened his eyes to the beautifully complex relationship between agriculture and sustainability. His current passion project has been fermentation. Check out Iver's foodie blog-http://mypickledlife.com/



Summer 2015 Forecast

When we released The 2015 Old Farmer's Almanac last fall, we predicted the T-Rex of winters for most regions. Now get ready for that ice to melt! In this same issue, we've also predicted a sizzling summer.

Across the United States, summer temperatures will be warmer than normal in all regions except parts of the mid-Atlantic and Southwestern United States. Rainfall will be below normal in most of the continent's midsection, which may reduce yields of corn, wheat, soybeans, and other crops grown within this area. The drought in much of California will likely continue as well, putting additional stress on our food supply.

In Canada, temperatures will be warmer than average except for Vancouver Island in Canada. However, rainfall will be above normal from the Maritimes westward through Ontario, slightly above normal in the Prairies, and at or below normal elsewhere.



Regional Highlights

Below are regional U.S. weather highlights for July and August of 2015:

Northeast: Summer will be hotter than normal, with below-normal rainfall. The hottest periods will occur in early June, early July, mid- to late July, and early August.

Atlantic Coast: Summer will be hotter and drier than normal, despite a tropical storm threat in early to mid-August. The hottest periods will occur in early June, mid- to late July, and early to mid-August.

Forecast continued

Appalachians: Summer rainfall and temperatures will be close to normal, on average, with the hottest periods in mid- to late June, mid- to late July, and mid-September.

Southeast: Summer will bring near-normal temperatures, on average, with the hottest periods in early to mid-June, mid- to late July, and mid- to late August. Rainfall will be below normal in the north and above in the south. Watch for a tropical storm threat in mid-July.

Florida: Summer will be hotter than normal, with the hottest periods in late June, early to mid-July, late July, and late August. Rainfall be above normal in the north, but a bit below normal in the south. Watch for a tropical storm threat in mid-July.



Lower Great Lakes: Summer will be hotter than normal, with near-normal rainfall. The hottest periods will be in early June, mid- to late July, and mid- to late August.

Ohio Valley: Summer will be hotter and drier than normal, with the hottest periods in mid- to late June, mid- to late July, and early to mid-August.

Deep South: Summer will be hotter than normal, with near-normal rainfall despite hurricane threats in mid- and late July. The hottest periods will occur in early to mid-June, mid- to late June, mid- to late July, and late August.

Forecast continued

Upper Midwest: Summer will be hotter and drier than normal. The hottest periods will occur in mid- to late June, early and mid-July, and early August.

Heartland: Summer will be hotter and slightly drier than normal, with the hottest periods in mid- to late June, mid- to late July, and throughout August.

Texas-Oklahoma: Summer will be hotter and drier than normal, despite a hurricane threat in late July. The hottest periods will be in late June, early July, early August, and late August.

High Plains: Summer will be hotter and drier than normal, with precipitation above normal in the north and Intermountain and Pacific Northwest: April and May will be slightly drier than normal, with near-normal temperatures.

Desert Southwest: Summer will be slightly rainier than normal, with near-normal temperatures. The hottest periods will be in mid- and late June, early July, and mid- to late July.

Pacific Northwest: Summer will be drier than normal, with temperatures near-normal in the north and above elsewhere. The hottest periods will occur in mid- and late June and early to mid-July.

Pacific Southwest: Summer will be cooler than normal, with near-normal rainfall. The hottest periods will be in mid- and late June in the central valley; in mid- to late June, early August, and mid-September near the northern coast; and in late June, early August, and mid- to late September near the southern coast.

Alaska: Summer temperatures will be below normal, on average, with the warmest periods in mid-July and other warm periods in early July N and mid- to late July S and C.

Hawaii: Summer temperatures will be near normal, with the hottest periods in mid- and late July. Rainfall will be above normal, with a tropical storm threat in mid- to late August.

CALL FOR PHOTOS: Want to see your bee related photo on the cover of the Kelley Beekeeping newsletter? Send entries to **editor@kelleybees. com** & your photo could be selected for a future issue.



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