



Journal of the Eastern Apicultural Society of North America, Inc.

VOLUME 48, NUMBER 2 SUMMER 2021

Honey Bee Health Coalition

USDA GRAND CHALLENGE
WORKSHOP

Master Beekeepers

WHAT IS AN EAS MASTER
BEEKEEPER?

A Look Ahead to Kentucky

AN IN-DEPTH LOOK AT THE
UPCOMING CONFERENCE

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WELCOME, From the Desk of the President



Dear EAS members,

This has been a very interesting year. Most of our lives have been totally disrupted. Unfortunately, our 2019 Maine conference and our 2020 Massachusetts conference were both cancelled. I speak for myself and others in having a great appreciation to all those that spent their time and effort in preparing for those conferences.

Tammy Potter had been the Kentucky Director for some time, she contacted me last July to see if I wanted to take over that position as she is our Honey Bee Health Coalition representative and is the Kentucky State Apiarist. I agreed and the board voted me in. Then, to my surprise, Lou Naylor, the EAS Chairman of the Board, contacted me around the first of this year looking for a possible site to hold the 2021 conference since it had been cancelled in Massachusetts. After making several phone calls to local colleges, I realized that I was getting nowhere because either the facility was too small or they couldn't make any plans until later in the year due to Covid. I then had to turn to a conference facility. I found out that Paroquet Springs Conference Centre in Shepherdsville, KY was available. The EAS executive committee decided to present it to the Board of Directors and the vote was to move forward.

In the process of searching for a facility and letting the board know, one of my fellow EAS members said to me "Congratulations Mr. President". In my mind, I said "What?" This is because I was unaware of how things work in preparing for an EAS conference. I had no idea of what it entailed. We are putting together something in 6 months that is normally planned over one to two years. Fortunately, your Chairman Lou Naylor, Vice-chairman Linda Mizer, Erik Brown, Jacky Hildreth, and Bob Talkiewicz have been doing the heavy lifting in pulling this conference together. There are many others who are working in the background that I have not had the pleasure of working with directly.

The conference theme is "Bee Connected". After the last 12 months or so, most of us will agree that we need to be connected by gathering with our fellow EAS members.

Although we are not having the two days of short course, we are having a three day conference. There is a great lineup of speakers this year and there will be an apiary course headed up by Jennifer Keller and Don Hopkins with several hives on-site!!

The Master Beekeepers will be testing and certifying beekeepers. Since the candidates did not get to test last year, I am sure they are very excited to be a part of this prestigious program.

We will be having a barbecue Friday evening with a live band for your entertainment along with the awards ceremony and auctioning off of some unique items, such as pine needles. This should be a fun time.

August is quickly approaching and the conference time will be here before you know it. I want to encourage you to come to the conference and be a part of this informative and fun event. We want you to "Bee Connected".

Leonard Davis, DVM
2021 EAS President
EAS Kentucky Director
President Bullitt County Beekeepers Association
Shepherdsville, KY

HONEY BEE HEALTH COALITION

USDA Grand Challenge Workshop: Creating pollinator landscapes and beekeeping practices for a changing climate.

by Tammy Horn Potter

On Monday, May 17 & Tuesday, May 18, 2021, USDA along with the Honey Bee Health Coalition coordinated the afore-mentioned ambitiously-titled event with over 125 researchers, beekeepers, non-profit coordinators and interested stakeholders huddled over our computers on Zoom, clutching our lattes and every word Dr. Jeff Pettis uttered. When virtually shuttled into our breakout rooms, we dutifully contributed to the discussion in an effort to make our presence “count” for something. No less than the esteemed **Drs. Gloria DeGrandi-Hoffman** and **Kevin Hackett USDA-ARS** led for the event. Topics included: Climate Change, Seed Mixtures for Pollinator Nutrition and Bee-pollinated Crops, Overwintering Colonies in Storage Buildings, and Improving Honeybee Nutrition. It was an “all-hands-on-deck” gathering of personalities who are determined to face the changing climate that we have created and consider the consequences of our actions on the very insects responsible for our diverse diets and landscapes.

The parameters were clear:

- “Balance the big picture and the details – Keep pollinator health as a key goal; offer specific, concrete RESEARCH and SCIENCE ideas to help achieve it. Conversations should relate to pollinator research in the agricultural or apicultural realm and to the specific research objectives under discussion.
- This is not a policy discussion – It is a focus on RESEARCH and SCIENCE priorities. It is, however acceptable and encouraged to discuss needed research that could better inform policy decisions.
- This is not a Federal Advisory Committee –



There will be no voting or consensus-seeking. Rather, the intent is to capture a diverse range of perspectives and ideas.

- Engage – Inquire, share, contribute; listen.
- Be empathetic – Assume good intent; disagree respectfully.
- Create common understanding – Clarify technical terms and acronyms.
- Share screen/airtime – Be mindful of question/comment length.

Full disclosure: I could not attend the Monday meeting because I was taking a USDA sample in the field. However, Tuesday's discussions were very good. **Apimondia president Jeff Pettis** zoomed in from Rome, Italy, where he was planning for a deferred Apimondia conference in Ufa, Russia, to be held in 2022. He briefly reviewed the research on goldenrod pollen as well endorsed the queen breeding efforts of Project Apis M with its Hilo “treatment-free” queens: www.hilobees.com.

Other presentations included Cornell University **Dr. Scott McArt's** work with pesticides and blueberries, strawberries (8 pesticides on average), and apples in New York (some yards had 17 pesticides). Interspersed with his research was an invitation to all beekeepers to send samples to the Cornell Chemical Ecology Core Facility, which offers pesticide analysis of samples at very reasonable prices. According to Dr. McArt, assistant professor of entomology, a beekeeper may send a sample to be analyzed

for approximately 93 multi-residue pesticides for approximately \$90. This compares well with many labs that charge approximately \$300 a sample. The typical sample needs to have 10 grams, although the lab can sometimes analyze smaller amounts. For more information, see the following: <https://blogs.cornell.edu/cccef/>

His presentation was followed by Dr. Diana Cox-Foster, who used to be at Penn State, but now does research at the USDA Bee Lab in Logan. Did you know that in addition to tank mixes, organosilicones are in medicine, cosmetics, herbicides, ornamental lawn care and hair products? Even artificial snow has organosilicones. In her research, the central question was if organosilicones could be taken up by plants, in her case, tomatoes. The answer was a definitive, “yes,” with organosilicones accumulating in the leaves with the potential to be in pollen and flowers.

You get the gist: we attendees behaved ourselves and at least from what I could see, we didn't embarrass the organizations that many of us represent. But by the time we took our “bio-break,” I wondered, dear Reader, what is the point of sitting through meetings without any hope of policy change?

Here is the deal: The hotter the climate, the more insects. More mealy worms, more thrips. Presumably, these insects will impact our crops. So, the “chemical

treadmill” is not going away anytime soon. The stakes are high for a culture that is accustomed to enjoying at least 90 different fruits, vegetables, nuts (almonds), and other commodities that may depend on pollinators in a secondary-sense if not primary (think: cows that eat alfalfa pollinated by bees).

Yet every hive needs approximately 252 million flowers each year, ideally flowers that are not impacted by organosilicones. The need for more pollinator habitat couldn't be clearer.

I don't expect our EAS community to leave their jobs and plant pollinator habitat on a large scale, but all EAS members can help in some way, even if it is only to host a couple of flowering herbs such as mint and thyme in containers. More power to you if you plant a couple of milkweeds, although those tend to be more like annuals. Sage and salvias are blooming right now, defying the deck stacked against them. Coneflowers are a reliable flower of summer, but the coreopsis, monardas, and goldenrods are the punk-rockers of summer. Add them to your yard. The grand challenges may not be so grand if we meet them by planting one flower, one yard, one garden at a time.



Off-label Varroa Treatments Pose Long-term Risks for Beekeeping Industry

Honey Bee Health Coalition Publishes Guide Documenting How Commercial Beekeepers Keep Healthy Hives without Consistent Use of Off-label Varroa Treatments

By Marques Chavez and Matt Mulica

DENVER, CO – Commercial beekeepers are finding success treating Varroa, a parasitic mite that kills honeybees, in their hives without relying exclusively on off-label chemical treatments, according to a guide published this week by the Honey Bee Health Coalition. The guide is pivotal to the industry as Varroa mites are already showing signs of widespread resistance to existing varroacides.

“In the short term, relying on off-label products to treat Varroa may seem to be the lowest cost strategy. But overuse of amitraz, for example, increases the long-term risk of mite resistance and significant economic damage to the industry, as beekeepers may be left without effective control options. The operational decisions that each beekeeper makes will either promote or reduce the likelihood of developing resistance,” writes the Coalition in the Guide.

The Guide to Varroa Mite Controls for Commercial Beekeeping Operations lays out a vision that addresses the risks of resistance created by off-label use. Widespread resistance to amitraz poses a serious threat to the long-term financial health of every commercial beekeeping business. Continuous use of off-label amitraz, with increasing dosages and frequency of use as it becomes less effective, is very likely to cause amitraz to lose its effectiveness more quickly, just as other products like coumaphos and tau-fluvalinate have become largely ineffective for controlling Varroa mites.

“This new Guide was developed to try and stave off amitraz resistance long enough for researchers to find the next reliable varroacide.” said Matt Mulica, Honey Bee Health Coalition facilitator, “we developed the guide to show that you can be a financially viable beekeeper without consistently resorting to off-label products like Taktic.”

This guide aims to help commercial beekeepers

evaluate a variety of Varroa control methods that can be integrated into a management plan to protect their bees and their business. It highlights the experiences of beekeepers who are having success as they explore alternative strategies to limit their reliance on off-label amitraz and avoid using unregistered products.

“I’m extremely uncomfortable using unregistered products. Even if costs are higher short-term, I need to find other ways to control mites that will work and will work over time. That will cost me more initially but will make me money down the line,” said George Hansen, founder of the Foothills Honey Company, whose approach to Varroa treatment is featured in the guide.

In addition to documenting six case studies examining various approaches to Varroa treatment, the guide also reviews the causes and impacts of Varroa mite resistance to varroacides. It also highlights control methods that can be used in an integrated pest management (IPM) strategy or a highly specific, knowledge-driven approach, referred to as precision apiculture.

The full guide is available for free on the Honey Bee Health Coalition’s website at:

<https://honeybeehealthcoalition.org/varroacontrolsguide/>

ABOUT KEYSTONE POLICY CENTER

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Happy Pollinator Week!

June 21-27, 2021

Pollinators need your help!

- ❁ Plant flowers!
- ❁ If using pesticides, follow the label and best practices
- ❁ Leave natural areas natural and don’t mow wildflowers
- ❁ If you keep bees, follow best practices for managing pests and disease



TO LEARN MORE ON HOW YOU CAN HELP, VISIT:

HoneyBeeHealthCoalition.org

FarmersForMonarchs.org



**HONEY BEE
HEALTH
COALITION**



**FARMERS FOR
MONARCHS**

MASTER BEEKEEPERS



What is an EAS Master Beekeeper?

By Landi Simone, Master Beekeeper

It was a hot, sweaty day in bees. Working a yard with about two dozen hives, in full sun, with the temperatures climbing well into the upper 80's, I found myself thinking I was glad I'd stayed indoors yesterday, when the high was 92. As I moved down the line of bees, pulling frames of brood, bees and honey for mating nucs and replacing them with frames of foundation, marking queens when I found them, and adding honey supers as needed, I felt grateful for the linden flow that kept the bees busy and made them a bit less annoyed by my invasive ministrations. The occasional sting elicited a few choice words followed by a mini lecture that I wasn't there to do harm, so what's the sense in dying to repel a non-threat? As I worked, my mind wandered to our upcoming EAS conference and this year's crop of candidates ready to brave the four qualifying examinations that would end in one of two ways: either the candidate would earn the right to put the words, "EAS Master Beekeeper" after his or her name, or they'd have to return another year and try again.

I've been involved in our EAS Master Beekeeper program since becoming certified myself in 2004. It was Virginia's Billy Davis, may he rest in peace, who gave me the push to make the attempt. I met Billy at the 2002 conference at Cornell – my very first one. I loved the fact that I could sit down to lunch with beekeepers of all stripes, from famous researchers like Marla Spivak to humble hobbyists attending from far-off exotic places like New Zealand! Billy, as head of the Sustainable Honey Bee Project in northern VA, was one of the famous ones. What did we all have in common? A crazy fascination for

one of the most remarkable animals on the planet – *Apis mellifera*. Billy and I were enjoying a lively conversation on Growing Degree Days when suddenly he stopped and said, in his slow Mississippi drawl, "Ya know, y'all should take the exam." "What exam is that?" "The Master Beekeeper exam, girl. I think you'd make a great Master Beekeeper." At the time, I'd been keeping bees just five years, and had no idea there even was such a thing as a Master Beekeeper. Two years later, at Seven Springs PA, I took the exam and became one.

Why does the Master Beekeeper program exist? Why become a Master Beekeeper? Is it for love? For money? For glory? What motivates a person to undergo a two-day arduous ordeal (and it is that!) for a chance to earn that title?

I'd have to say that for me, my initial motivation was simply to prove to myself that I could do it. But that motivation started to change when I began to prepare myself to take the test. I'd get up very early in the morning, before my kids, who were still little at that time, awoke, grab a mug of tea, my books, and head to the back porch, where I immersed myself in the literature for a couple of hours while the sun rose, the



birds called, and the world awoke. When my husband and kids got up, I couldn't help myself.... I had to share the fascinating tidbits I'd learned that morning. "Did you know that bees have places in the sky where they go to mate and those places don't change from year to year? Yeah! Really! They're called drone congregation areas. The drones fly a shorter distance to them than the queens do so they don't inbreed. Isn't that wild?!" My family, initially interested, soon became sick of hearing me talk of nothing but bees. Eventually I learned I must curtail "bee talk" entirely on pain of

multiple eye rolls, heavy sighs, and sudden urgent tasks elsewhere. But the urge to talk bees didn't leave with my audience. And that compelling need to share what I know about honey bees remains with me to this day and is by far the biggest reason I am an EAS Master Beekeeper.

The Master Beekeeper title is a teaching certification. That is how it started, and that is what it remains today. It was started in the early 1970's by Dr. Roger Morse of Cornell University because there were too many people asking questions about bees and only

one of him. He devised an exam to test the knowledge of more experienced beekeepers so that they could be a qualified information resource for anyone looking for more knowledge about honey bees, be it a member of the press, the general public, or a new beekeeper. Eventually the program was taken over by EAS, and it has become one of the Society's core missions: to test and certify Master Beekeepers. Dr. Dewey Caron was involved in the development of the program in its early days and has always been a strong supporter, serving as Academic Advisor and a long-standing member of the Certification Committee.

EAS's Master Beekeeper program is the oldest and likely the most respected certification in the United States and is rivalled only by the UK's program world-wide. Unlike many state and university programs, EAS does not provide coursework or have levels of certification (apprentice, journeyman, etc.) It is a rigorous test of knowledge one is expected to obtain independently. The testing is very difficult. We are not certifying beekeepers as competent. We are certifying them as masters of our craft.

The exam has evolved over the years. As far as I know, there has always been a written exam and laboratory exam, both created by an Academic Advisor – a university-level professor or researcher who is responsible for creating and grading these two exams and for being the final arbiter in any question or dispute. The field exam has also been in place for many years, and that exam is administered by Master Beekeeper volunteers. The oral exam is the newest testing protocol, also given by volunteers. I believe it began only a year or two before I was tested – probably in 2002 or 2003. The oral exam arose as a result of the realization that knowledge alone does not make a good teacher; one must be able to communicate that knowledge in a clear and accurate manner. Some ten years or so ago, EAS established a Certification Committee, responsible for accepting/rejecting candidates and overseeing the entire process. The Committee is constantly working on tweaking the examination process to insure it is both impartial and rigorous. Today, a panel of three Master Beekeeper volunteers evaluates candidates in their oral examinations, which have both a prepared and an impromptu component. The panel is carefully chosen so no one with a potential bias for or against a particular candidate serves on that candidate's panel. New volunteers are trained with more experienced

ones before being "turned loose." The field exam has similarly evolved, with two volunteer examiners evaluating a candidate's ability to inspect, diagnose and make management decisions. Even the colonies chosen for the exam have evolved over the years. We now deliberately try to set up colonies with "issues." The ability to correctly diagnose any and every possible condition in a bee hive is a critical skill for a Master Beekeeper, who must have field skills akin to those of a good State Apiarist. The field and oral exams are overseen by two exam Coordinators – "super" volunteers with crazy organizational skills who put together the testing teams and schedule everything so nothing falls through the cracks, everything goes smoothly, and everyone gets tested. Believe me, pulling all that off is quite a challenge!

What do we look for in candidates? I think that, many years ago, beekeepers who took the test did so more for bragging rights than anything else. Although many of them were looked up to as resources in their communities, the focus was not so much on teaching or volunteerism as it is today. Today, when we look at candidates' applications, one of the biggest things we're interested in is to what degree that person helps others in their own community. Do they teach a short course or want to start one? Are they active in their local club? Do they mentor other beekeepers? Experience and competence are baseline requirements, but the desire to share one's knowledge and love of honey bees is at the heart and soul of every EAS Master Beekeeper.

As I type this, I'm sitting on the same porch where I studied so hard for that exam, nearly twenty years ago. I have another bee day planned for today. The weather is cloudy, but at least it's cooler than the past couple of days. If it's too cloudy for good nectar production and the bees stay home, it might be one of those "pin cushion" days. I try to focus on the possible health benefits of honey bee venom on days like that, and I think of something my dear friend Tim Schuler, former NJ State Apiarist and one of the finest beekeepers I've ever known, often says, "The worst day in bees is better than the best day not in bees."



AWARDS AND GRANTS

2021 EAS Foundation for Honey Bee Research Grants

By Jennifer Lund, Chair Foundation for Honey Bee Research Committee

Two research projects were awarded EAS Foundation Research Grants in 2021. A total of 21 very competitive grants were submitted on a variety of topics.

GRANT 1:

A grant for \$10,000 was awarded to Dr. Alison McAfee and Dr. David Tarpy from North Carolina State University and Dr. Leonard Foster from the University of British Columbia for their grant titled “The influence of abiotic stressors on the queen gut microbiome.”

As most beekeepers are aware, the microbial community in honey bee workers is closely linked to their health. Gut microbes in worker bees have been shown to assist with processing macronutrients, are vital for detoxification, play a role in activating workers baseline immune function and can improve resistance to brood diseases. Unfortunately, not much is known about the role the queen gut microbiota plays in overall queen health.

Understanding the role of the microbial community of queens has become increasingly important as the stressors places on queens is becoming more widely understood. Abiotic stressors, such as temperature stress during shipping or pesticide stress through contact with contaminated wax, correlate with declines in queen quality.

To understand the linkages between the queen gut microbiome, its potential association with queen failure and how it may respond to abiotic stressors, McAfee et. al. will compare gut microbial community profiles of queens exposed to temperature stress, as well as pesticides, to bees in control groups to determine if these stressors alter queen microbiome composition and structure.

During the summer of 2020, the researchers



Dr. Alison McAfee from North Carolina State University

conducted queen stress experiments. For the temperature stress experiments, queens were randomly assigned to either cold-shock at 4°C for 2 h, heat-shock at 42°C for 2 h, or room temperature control groups. For the pesticide stress experiments, a different group of queens were randomly assigned to either the pesticide treatment, acetone only treatment, or untreated control groups. Following treatment, queens were returned to their nuc colony, allowed to lay for two weeks, and then frozen in an ultra-deep freeze until processing. The grant monies provided by EAS will be used for the microbiome analysis of the 60 queen gut samples the research team currently has in the freezer.

McAfee et. al. believe that determining linkages between the gut microbiome is important for understanding the factors contributing to the high rates of queen failure. If researchers develop techniques to manipulate the queen gut microbiome in the future, this work could provide a microbial community template to help identify disruptions to gut homeostasis or regain the bacterial community associated with a healthy state.

GRANT 2:

A grant for \$1,345 was awarded to Ed Levi of Fayetteville, AR and Mbola Razanakolona of Antananarivo, Madagascar for the grant titled “A project to determine if developmental times of *Apis mellifera* unicolor is a natural deterrent to the development of Varroa mites in Madagascar”

The subspecies of the western honey bee (*Apis mellifera* unicolor) found in Madagascar are unique to the island and have behaviors unlike the various *Apis mellifera* subspecies found in Africa and South Asia. Subspecies unicolor are rarely defensive, don't

readily swarm or abscond, and they don't have the characteristically “runny” behavior found in many *A. mellifera* subspecies of Africa.

Many subspecies and genetic lines of *Apis mellifera* have demonstrated various levels of natural defenses against Varroa mites. Some groom more frequently, some bite mites found in the hive, while others have hygienic behavior that expel mites from the brood. Levi and Razanakolona aim to find out if the development time of *A. mellifera* unicolor is different than other subspecies of *A. mellifera* which may be a natural defense to varroa mites.

Apis mellifera unicolor queens (DNA verified by University of Florida) will be installed in both observation and field hives during the late summer of 2021. Time required to reach all developmental benchmarks (egg laying, egg hatch, larval growth, cell capping, adult bee emergence, etc.) will be recorded and compared to other subspecies of *A. mellifera*. If this preliminary project shows shorter development times compared to those of other western honey bee subspecies, this project will be replicated and verified by a larger study.

Ed Levi of Fayetteville, AR



FEATURES ARTICLES

A Brief History of Beekeeping in Kentucky

By Tammy Horn Potter, KY State Apiarist
Kentucky Department of Agriculture

For much of its early years as a state, established in 1792, Kentucky was a place where healthy colonies of bees swarmed ahead of settlers, and in some cases, the honey bees had higher survival rates than European settlers. The Scandinavian saying, “forests are the mantle of the poor,” was true in this state. Healthy forests provided plenty of trees, specifically black gum, so much so that swarms would settle into the interior of decaying gum trees. Settlers started calling these colonies, “bee gums” although these stocks of bees could not be managed because the colonies would fix their comb foundation to the tree’s interior.

The late nineteenth century was a remarkable time for Kentucky beekeepers. Unlike bee gums, moveable frame hives allowed beekeepers the ability to monitor

a queen bee’s pattern, the health of her brood, and the honey production. Lorenzo Langstroth’s moveable frame design featured the patented 3/8 inch (“bee space”) between moveable frames was quickly adopted by beekeepers everywhere, including Kentucky. One group in particular, the Shakers, invested in moveable-frame hives in its communities in Kentucky: one in Pleasant Hill outside Harrodsburg, and the South Union community near Bowling Green. Honey and beeswax candles were staples and income-earners for these villages, although the South Union community struggled, especially during the Civil War. The Shakers also invested in Italian queen bees as soon as the queen bees were imported into the United States and became available for purchase. For EAS attendees, both of these sites are open to visitors, although the South Union site does not have bee hives. The Pleasant Hill site does have hives, but in a remote location. The Pleasant Hill location has many demonstrations, a restaurant and lodging.

After the Civil War, to rebuild their farms, Kentucky farmers planted many of their fields with various types of clovers for their dairy and cattle operations. Along with these clover-rich pastures, Kentucky beekeepers adopted the four nineteenth-century beekeeping “inventions” to their benefit, i.e., the moveable-frame hive, the smoker, the comb wax-foundation maker and the honey extractor. Nineteenth century Kentucky beekeepers produced prolific amounts of honey.

And a Kentuckian, G.W. Demaree, managed to figure out how to manage a hive preparing to swarm. For any beekeeper who has inwardly groaned at seeing a hive’s population depart in a swarm, the Demaree method may be one for you to try. Demaree was a prolific writer and attorney who started keeping bees on his farm in Shelby County (south of Louisville). Determined to not lose all of his bees to swarming, he started a practice that involves, during an inspection, placing any queen cells, nurse bees and brood above the queen excluder, in effect a vertical split from the queen and the forage bees below the excluder.



Gum Tree, KY



Photo courtesy of Shaker Village of Pleasant Hill in Harrodsburg, KY

In a few days, the beekeeper will need to remove any newly-formed queen cells in the top, leaving the brood to emerge in the top. Not only does this keep the population from leaving, it does not involve specialized equipment.

By the twentieth century, Kentucky, with its centralized location in the Heartland, became a good location for bee equipment suppliers. Businessman Walter T. Kelley relocated his beekeeping supply factory from Louisiana to Kentucky after the devastating 1927 Mississippi flood, settling in Paducah first before moving the factory to Clarkson. [note: Mann Lake bought Walter T. Kelley’s in 2019. Wax foundation, smokers, and bee jackets are still made at this factory. It has a visitor’s area and gift shop as do many other vendors in the area].

Other bee supply vendors have located to Kentucky in the 21st century: Dadant and Sons has an outlet in Frankfort. The Honey and Bee Connection opened in



Portrait of G. W. Demaree

Morehead in 2011. The Bee Barn is located in Paducah, and Pete Zook Bee Supply is located below Bowling Green. Most recently, HoneyBear Farms opened in Louisville. In addition, with over 54 local bee associations, the state has approximately one association for every two counties.

Currently, Kentucky beekeepers struggle with the same pressures that every state has: pesticides, pathogens, poor nutrition, and pests. In the past decade, there has been a shift in state resources to focus on science-led efforts to resolve these problems. Beginning six years ago, the Kentucky Department of Agriculture State Apiarist Tammy Horn Potter collects samples for the USDA Honey Bee Health Survey and the Native Bee and Wasp Survey. The Kentucky Department of Agriculture defined its Pollinator Protection Plan, accepted by the Commissioner of Agriculture in 2017, creating a communication tool for users that is free, anonymous and easy to use.

The Governor's Office of Agriculture Policy has funded a bee virus lab at the University of Kentucky, run by Dr. Clare Rittschof. It has also funded a honey testing lab at Bluegrass Community and Technical College to help beekeepers correctly label their honey [samples are on hold because of pandemic restrictions]. The Honey Testing Lab is led by Drs. Deborah Davis (BCTC) and Jen O'Keefe (Morehead State University). The Kentucky State Beekeepers Association also applied for funding to launch its Certified Kentucky Honey Program to help consumers make educated decisions

purchasing honey produced in the state. The Kentucky Queen Bee Breeders Association focuses on distributing diverse queen bee genetics across the state and collecting feral swarms.

Most recently, Dr. Clare Rittschof (UK) has received a three-year National Science Foundation grant that will include Youth Pollinator Summits, to be coordinated with many community partners and the state apiarist, Tammy Horn Potter. The effort to provide science-based results to beekeepers and consumers represents an exciting pivot for Kentucky.



Clare Rittschof and the Honey Testing Lab



The newly funded Honey Lab team at Bluegrass Community and Technical College (BCTC) are congratulated by Agriculture Commissioner Ryan Quarles (third from right). From left: Dr. Greg Feeney, vice president, BCTC academics and workforce development, who spearheaded BCTC's provision of the grant matching funds; Tammy Liles, BCTC academics dean; Dr. Jen O'Keefe, professor of geology and science education, Morehead State University; Abbe Kesterson, BCTC director of biotechnology program development; Dr. Deborah Davis, BCTC biotechnology program coordinator; Quarles; Dr. Augusta Julian, president-emeritus (BCTC president is now Dr. Koffi C. Akakpo); and Tammy Potter, state apiarist.



All photos on this page courtesy of Shaker Village of Pleasant Hill in Harrodsburg, KY





UPCOMING CONFERENCE BEE CONNECTED WELCOME TO KENTUCKY



Bee Connected AUGUST 11-13, 2021

by Dr. Linda A. Mizer



The EAS conference of 2021 is being held at the Paroquet Springs Conference Center, in Shepherdsville, Kentucky from August 11th to 13th.

Registration is required prior to the conference. Registration for the conference is \$300 and payment is required at the time of registration. There will be no walk-in registrations. Register at [https:// easternapiculturesociety.wildapricot.org/event-4219155](https://easternapiculturesociety.wildapricot.org/event-4219155). Conference parking is free.

Although the 2021 EAS Conference does not include a short course we have apiary classes planned – we look forward to returning to our traditional format in 2022. All of the presentations will be given in a single room set up with socially distanced table surfaces for everyone. At this time the CDC and the State of Kentucky have lifted the mask mandate for vaccinated individuals indoors. Those who are not vaccinated should wear a mask. Masks are acceptable for everyone to wear, if they wish.

A single lecture series schedule will be a change for EAS this year. Although a single lecture series cannot provide the depth that three or more concurrent lecture options might, it does mean that there is no jostling between rooms and you won't have to make a decision as to which lecture you attend and which you miss! Just settle in, relax and enjoy the program. The lineup of presenters include: C. Bee, John Benham, Deborah Delaney, Jamie Ellis, Erin McGregor Forbes, Kevin Inglin, Cameron Jack, Tammy Horn Potter, Juliana Rangel, Kent Williams and Jon Zawislak.

The Apiary Courses are organized by the Bee Wranglers Jennifer Keller and Don Hopkins. The apiary will be setup in the grassy area behind the conference center, allowing easy access to restroom facilities, refreshments and vendors. All discussions (weather permitting) will be in the apiary.



Schedule

There are half-hour break/vendor times scheduled each morning during which light refreshments will be served. Lunches and dinners are on your own with the exception of the free BBQ event on Friday, August 13th.

Be sure not to miss the BBQ event on Friday 6-9 pm which will be held on the back lawn of the conference center. There will be live music performed by Shepherdsville's Mary's Dad's Band, the Master Beekeeper certificates will be awarded and the new Lifetime Members will be recognized. Also planned is a short on-site auction and the winners of the on-line auction items will be announced. A cash bar will be open.

Mary's Dad's Band is an acoustic trio lead by Mary Alice Lawson with her rich voice and Gibson guitar. Add in 70's rocker, Sean Lawson and Paul Colon, a traditional bluegrasser before MDB and you have a recipe for something special.



Conference Schedule:

WEDNESDAY, AUGUST 11

8:30 am	Registration Materials Pickup		
9:00 am	EAS Conference Introductions <i>Salt River Expo Hall</i> Lou Naylor, Chair EAS and Leonard Davis, KY President		
	Salt River Expo Hall	Apiary	
9:15 am	C. Bee <i>Beekeeping as a Super Power</i>	Apiary Jennifer Keller and Don Hopkins <i>Introductions</i> <i>How to Inspect Hives</i>	
10:15 am	Break/Vendors		
10:45 am	Tammy Horn Potter <i>Establishing Pollinator Habitat</i>		
noon-1:30 pm	Lunch Break – individual arrangements, visit Vendors		
PM WEDNESDAY August 11			
	Salt River Expo Hall	Apiary	
1:30 pm	Debbie Delaney <i>Honey Bee Sensory Equipment</i>	Checking for Varroa mites Sugar shake and alcohol wash	
2:45 pm	Break/Vendors		
3:15 pm	Kent Williams <i>If I Could Have a “Do-over”, Things I Would do Differently</i>	Brood Diseases in the Hive	
4:30 pm	Visit Vendors		
	Visit Vendors		
5:00 pm	EAS Board of Directors Meeting		
Evening	Dinner - individual arrangements		

Conference Schedule:

THURSDAY, AUGUST 12

9:00 am	EAS Conference Announcements, <i>Salt River Expo Hall</i>	
	Salt River Expo Hall	Apiary
9:15 am	John Benham	Q&A from first day Signs of the queen Identifying queen How to mark a queen When to requeen
	<i>The Threshold to Healthy Spring Bees Starts Now</i>	
10:15 am	Break/Vendors	
10:45 am	Jamie Ellis	How to make splits
	<i>Towards Sustainable Beekeeping</i>	
noon-1:30 pm	Lunch Break – individual arrangements, visit Vendors	
PM	THURSDAY	August 12
	Salt River Expo Hall	Apiary
1:30 pm	Erin McGregor Forbes	Sampling to test for <i>Tropilaelaps</i> spp.
	<i>Design and Implementation of a Public Educational Honey Exhibit</i>	
2:45 pm	Break/Vendors	
3:15 pm	Juliana Rangel	Testing for hygienic qualities
	<i>Understanding the Role of Nutrition in Honey Bee Health</i>	
4:30 pm	Visit Vendors	
	Dinner - individual arrangements	

Conference Schedule:

FRIDAY, AUGUST 13

	Salt River Expo Hall	Apiary
9:00 am	EAS Conference Announcements	Q&A from second day
9:15 am	Kevin Inglin	Results of test for Hygienic qualities
	Thinking Inside the Box – Swarm Prevention	
10:15 am	Break /Vendors	
11:00 am	EAS BUSINESS MEETING	
noon-1:30 pm	Lunch Break – individual arrangements, visit Vendors	
PM	FRIDAY	August 13
	Salt River Expo Hall	
1:30 pm	Jon Zawislak	
	Pheromones: The Language of the Colony	
2:45 pm	Break	
3:15 pm	Cameron Jack	
	Biology and Control with Oxalic Acid	
6:00-9:00 pm	BBQ with Live Band at Conference Center, Master Beekeeper Recognitions, Presentation of Lifetime Certificates, Divelbiss Award Winner.	

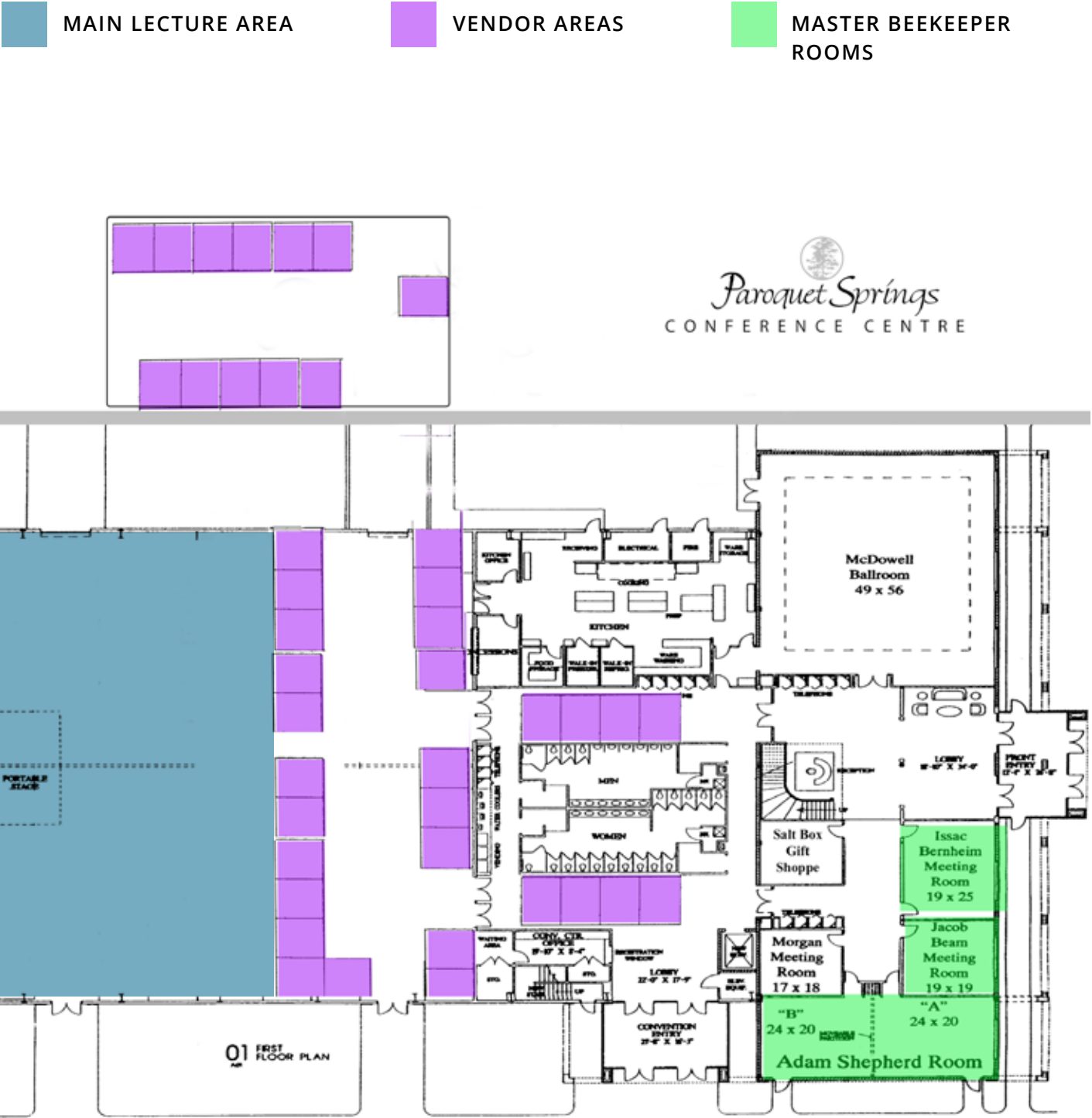
Master Beekeeper Schedule:

AUGUST 6 - 16, 2021

DATE/TIME	FUNCTION	LOCATION
August 6	Meet and Greet /Pre-Exam Q&A	Zoom session
6:00 pm – 7:30 pm	https://udel.zoom.us/j/98342799372	
August 10	Volunteer Dinner	TBA
5:30 pm – 7:30 pm		
August 11		
8:00 am – noon	Written Exam	Adam-Shepherd A-B
8:00 am – noon	Oral Exam	Morgan, Jacob Beam, Berenbaum
noon - 3:00 pm	Oral Exam	Morgan, Jacob Beam, Berenbaum, Adam-Shepherd B
August 12		
8:30 am -12:30 pm	Lab Exam	Adam-Shepherd A
10:00 am – 4:00 pm	Field Exam	Apiary
August 13	Master Beekeeper Annual Meeting	TBA
7:30 am – 8:30 am		
August 16	Virtual Exam Results Review	Zoom session
6:30 pm – 8:00 pm	https://udel.zoom.us/j/91787429726	

Vendors

Seventeen vendors have made reservations to date. The vendors will be set up in proximity to the presentation area and be available from Wednesday morning through Friday midday. Make sure to check out their booths and conference specials.



Auction

This year’s EAS Conference theme “*Bee Connected*” is bittersweet, as the connections will be from a distance. What will also be distanced is our customary nighttime live auction. This year we are taking our live auction virtual! We are happy to announce that whether or not you plan to attend our annual conference, you will be able to participate in the wildly popular EAS live auction.

Eastern Apicultural Society relies on the income received from our annual auctions, and have decided that in order to offer **all** of our members the opportunity to *Bee Connected* and participate in the live auction as well as derive the most income, we would change our nighttime live auction to an online silent auction format. The virtual auction will go live about a month before the conference, and the bidding will close at noon on Thursday August 12, 2021.

We will still offer our fun daytime silent auctions at the Paroquet Springs Conference Center in Shepherdsville, Kentucky, so do be prepared to bid on some awesome bee stuff while at the conference. As always, we ask if you have any items to donate to the daytime silent auction, please bring the items directly to the information desk at the conference.

Please keep an eye out for an email announcing the opening of the virtual auction. All of the information you will need to know will be contained in the email and on the virtual auction site. We have received generous donations from your favorite bee supply companies, state bee associations, vendors, businesses, and individuals, and hope that you are ready to Bee Connected and bid on great items that you really do need.

The auction winners will be revealed during the EAS business meeting! About a week or two after the conference, the donor will mail the items directly to the winning bidders.

Please help us make Eastern Apicultural Society’s first ever virtual auction a huge success by bidding early and often. Remember, Eastern Apicultural Society is a 501(c) 3 non-profit organization and your contribution(s) may be tax deductible! Donations are still being accepted for the virtual auction as well as the small onsite auction that will take place on Friday evening. Please contact Deb Klughers to donate.

Please feel free to contact me with any questions or concerns at debklughers@optonline.net.

My best to you and yours, and your bees,

Deborah Klughers
Auction Committee Chair

Visit the auction at
biddingowl.com/EAS2021



Auction Items



KENTUCKY BEE QUILT

When Hope Johnson found out that EAS was being held in Kentucky this year, she decided to make a small honey bee quilt with goldenrod, Kentucky’s State Flower and a favorite of honey bees, too. She designed this quilt especially for EAS 2021 and created an image to appear like a seal or coat-of-arms. It is made of cotton fabric and batting, and the wings are silk. Using hand embroidery, the pollen on the worker bee’s legs are french knots and the antennae are running stitches. The quilt is machine appliqued and machine quilted. Dimensions of the “Kentucky Honey Bee” quilt are 28 inches wide by 25.5 inches high and there is a sleeve on the reverse side for hanging. Suggested retail value is \$ 400.00.



MATED QUEEN FROM GARDNER APIARIES

2 vouchers, each for 1 mated queen for 2022 season from Gardiners Apiary. (two separate prizes)

<https://gardnerapiaries.com/contact-us/>



DADANT GIFT CERTIFICATES

2 \$250 gift certificates

<https://www.dadant.com>



BEE SMART DESIGNS - QUAD

Bee Smart Designs has provided a “Quad Deal” of components from their modular hive system. This includes the Ultimate Hive Cover, the Ultimate Robbing Screen, the Ultimate Bottom Board and a Handle. These units may be used on either 8-frame or 10-frame woodware.

<https://www.beesmartdesigns.com/>

Painted Hives

By Linda A. Mizer

The tradition of “painted hives” at the EAS Conference is becoming firmly established! Local organizations are recruited to paint hive boxes that are then auctioned off at the conference. The funds raised from the silent auction is donated to the organizations that provide the hive boxes.



What would you do with a painted hive? Well, first, really enjoy the beauty it brings to your bee yard. Each box is unique and the artwork varies greatly from the abstract through every genre – usually with a strong bee association.



They are also useful as a part of your bee operation.



A painted hives also provides a great focal point at an exhibit.



Monica Schmitt, Vice President Carroll County relates: “I have about 8 hive bodies in action. Here are two being used for our outreach event for Carroll County Beekeepers Association. The one on the left is from VA, and the one on the right is from SC.

Inside them is our honey bee information slides on frames for the community to be able to look at and get the feel how we open a hive and pull frames.”

This year the Bullitt Country 4H Beekeeper group, led by Dr. Leonard Davis and mentored by the Bullitt County High School Art Program, will be painting hive boxes of different sizes. Can't wait to see what they come up with!



Local Attractions



2.



1.

1. BERNHEIM ARBORETUM & RESEARCH FOREST

In 1928, Kentucky bourbon distiller Isaac Wolfe Bernheim purchased 12,000 acres of land in Builit County, KY that had been denuded and stripped for mining iron ore. The land was subsequently rehabilitated through the design of the Olmsted Brothers into the 14,378 acres that opened as the Bernheim Arboretum and Forest in 1950. The land is now the official state arboretum and is located approximately 7.5 miles the conference center. Stroll the walkways and scenic raised outlooks and discover the wonderful “Giants” featured along the way. For more information, visit their website at: <https://bernheim.org>



3.

2. CHURCHILL DOWNS AND KENTUCKY DERBY MUSEUM

Churchill Downs is located approximately 15.5 miles from the conference center. It opened in 1875 and has been the site of the Kentucky Derby every year since then. The museum houses an extensive history and memorabilia of the horse raising heritage of the region. For more information, visit their website at: <https://www.derbymuseum.org>

3. GENERAL GEORGE PATTON MUSEUM

The General George Patton Museum is housed at the Fort Knox Military Training Base, approximately 14.6 miles from the conference center. The museum explores the history of the United States Army through personal stories, artifacts, and film while viewing the foremost collection of Patton material in the world. For further information, visit their website at: <https://generalpatton.org>

4. FRAZIER KENTUCKY HISTORY MUSEUM

Just 19 miles from the conference center, the Frazier Kentucky History Museum features daily live performances and educational exhibits. Full details of their location and exhibits may be found on their website at: <https://www.fraziermuseum.org>

5. HERITAGE GOLF COURSE

Located 4 miles from the conference center, Heritage Hill Golf Course is an 18-hole championship, par-72 golf course rated a Top 10 New Course in America in 2008 by Golf Digest. For further information visit their website at: <https://hhgolfclub.com/course/>



5.

6. KART KOUNTRY

For family entertainment and young at heart of all ages, the Kart Kountry features go-carts, water features and miniature golfing. Located within walking distance of the conference center, this attraction features something for everyone. Further information may be found at their website: <http://gokartkountry.com>



6.

4.



7. BULLITT COUNTY WINE & WHISKEY TRAIL

With four wineries and two distilleries, the Bullitt County itinerary is easy, fun and informative.

With more than 1 million tourists flocking to Kentucky for the ultimate bourbon experience each year, the endless options of what to do, where to go, how many stops to make a day, etc., can be daunting

for first-time travelers embarking on the Kentucky Bourbon Trail. But one commonwealth county has developed a unique experience for those interested in both whiskey and wine, and it's easy to complete as a one- or two-day excursion. Bullitt County's Wine & Whiskey Trail features two bourbon experiences and four wineries, all located in the 300-square-mile county that sits just south of Louisville.













Bullitt County Wine & Whiskey Trail

Brooks Hill Winery

MillaNova Winery

Forest Edge Winery

Wight Meyer Winery

Four Roses Bourbon Experience

Jim Beam American Stillhouse















Bullitt County Wine & Whiskey Trail

Day One

11:30 AM

Start your day with a hardy lunch at the **Hillview Family Diner**, 1679 Old Preston Hwy. Nth. in Hillview. Enjoy the home cooked goodness of their daily lunch specials or grab a burger and fries off the menu. This is one of those places that usually only the locals know about.

1:00 PM

Head west on Hwy. 1526 for your first trail stop. **Brooks Hill Vineyard and Winery** was the dream of Mike & Karen Hatzell. They purchased some dilapidated land and transformed it into a beautiful vineyard. The tasting areas are both charming and relaxing. Don't forget to pick up your *Wine and Whiskey Passport Brochure* and get it stamped.

2:30 PM

Go east on Hwy. 1526, then left onto Blue Lick Rd and one mile to **Fire Studio & Gallery**. Watch artists create Kentucky hand-blown glass right before your eyes, take a tour, and shop for beautiful gifts from their large gallery of unique and colorful creations.

4:00 PM

Head south on I-65 to Exit 117, then east on Hwy. 44 to **MillaNova Vineyard and Winery**. John & Donna Miller wanted to honor their family's Italian heritage, so what better way than to open a winery. Enjoy the views while sampling their award-winning wines.

5:00 PM

Go west on Hwy. 44, then I-65 south to Exit 116. Head east and in minutes you will be back in vineyard and wine country at **Wight-Meyer**. This winery has the most mature vineyard of all of our county's wineries and the grapes produced here garner several award-winning wines. Let owners Jim & Sandy Wight tell you all about it.

6:30 PM


Head back to Shepherdsville to check into one of our 14 hotels. We have many of the major brands at I-65 exits 117 and 121. Reservations recommended - more info at www.travelbullitt.org.

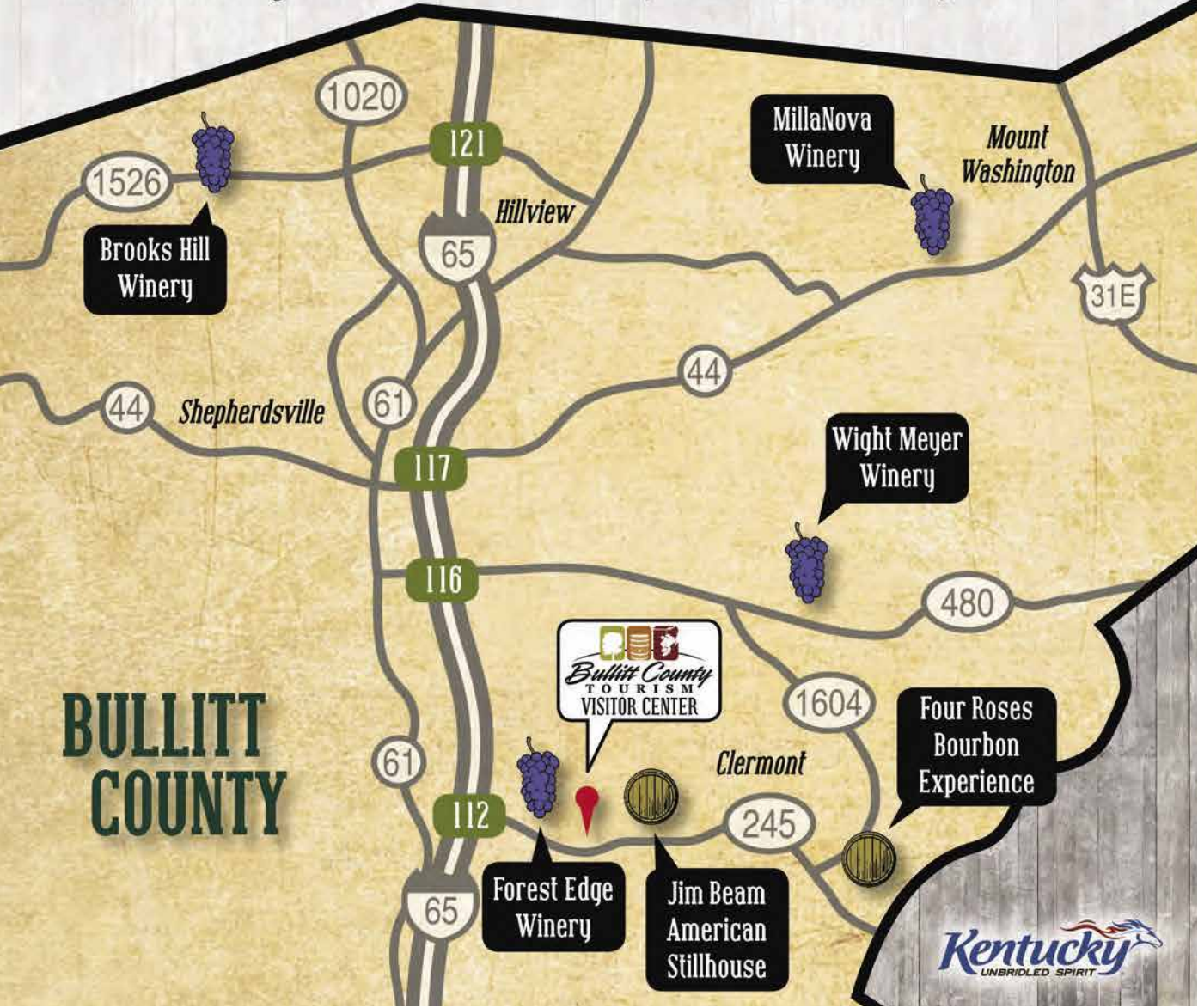
7:00 PM

To rustle up some grub for the night, head over to **Cattleman's Roadhouse**. The menu has it all. From steaks and seafood to burgers and chicken wings. They also have a great salad bar. Speaking of bars, enjoy a nightcap at Cattleman's Jim Beam Bar.

Included in the trail are the Jim Beam American Stillhouse and Four Roses Warehouse & Bottling Facility, as well as Forest Edge Winery, Wight-Meyer Winery, MillaNova Winery, and Brooks Hill Winery.

And just like the Kentucky Bourbon Trail, those looking to complete the Wine & Whiskey Trail can pick up a passport/brochure at a participating location and collect stamps along the way.





Directions

Brooks Hill Winery
I-65 to Exit 121 - west 3 miles on Hwy. 1526 to entrance on right.

MillaNova Winery
I-65 to Exit 117 - east 6.5 miles on Hwy. 44, then left onto Bethel Church Road - 1 mile, then left onto Gentry Lane - 1/2 mile to entrance on right.

Wight Meyer Winery
I-65 to Exit 116 - east 4.5 miles on Hwy. 480, then left onto Pine Creek Trail - 1.3 miles, then right onto Meyer Drive - follow to end.

Forest Edge Winery
I-65 to Exit 112 - east 1.3 miles on Hwy. 245 to entrance on left.

Jim Beam American Stillhouse
I-65 to Exit 112 - east 1.5 miles on Hwy. 245 to entrance on left.

Four Roses Bourbon Experience
I-65 to Exit 112 - east 5.5 miles on Hwy. 245, then left onto Hwy. 1604 - 1/2 mile to entrance on right.

Accomodations

EAS has reserved blocks of rooms at both the Country Inn and Suites by Radisson and the Sleep Inn and Suites.



COUNTRY INN AND SUITES BY RADISSON

The Country Inn is a stone's throw from the conference center. There are standard rooms \$109, (\$124 including taxes) and suites with a door dividing the bedroom \$119, plus tax. Jacuzzi suites without a sitting area \$129, plus tax. The code is EAS 2021 and you need to reference the date 8/11-8/13 but you can then add dates to your reservation. Included breakfast is currently a grab and go but seating will be opened for the conference. There is a pool, fitness center and conference room and a business center with a printer available. Free parking is provided and recreational vehicles/campers may park on site at no cost.



SLEEP INN AND SUITES

Is an easy walk across the parking lot to the conference center. We have a block of rooms with rates of \$109 standard, plus tax, and \$119 for suites, plus tax. The rooms do not provide storage draws for clothes, however, the rooms are otherwise acceptable. Any remaining unused rooms the EAS block will be released to the public on 08.01.2021. Use the code EAS 2021 when making a reservation.

Other Accomodations



BAYMONT INN & SUITES

I-65 Exit 121; 149 Willabrook Dr., Brooks, KY 40109
(502) 957-6900 (800) 4-CHOICE FAX: (502) 957-6793
66 Units; AAA, AAPR, Corporate and Military Discounts; Widescreen TV ,Coffee Maker; Hairdryer; Safe; Microwave and Refrigerator Available Upon Request; Free Cable; Indoor Pool; Sauna and Jacuzzi; Meeting Room (25); free continental breakfast. Data Ports Available in All Rooms. \$10 Pet Fee.



BEST WESTERN PLUS SOUTH

I-65 Exit 117; 211 S. Lakeview Dr., Shepherdsville, KY 40165
(502) 543-7097 (877) 543-5080 FAX: (502) 543-2407
85 Units; Three Diamond AAA Rated; Newly-Renovated Rooms; Live Entertainment; Seasonal Pool; Spa Suites; Complimentary hot breakfast; Deluxe Fitness Center; outdoor pool, Coffee Maker; Iron/Board; Hairdryer; Microwave; Refrigerator Available upon Request; Free HBO/ Cable; Meeting Room (100); Data Ports; Free Access to High Speed Internet; Lounge/Bar; Small Pets, other amenities.



ECONOLOTGE

I-65 Exit 121; 1901 E. Blue Lick Road, Brooks, KY 40109
(502) 955-1501 (800) 553-2666 FAX: (502) 955-1574
50 Units; Three Star AAA Rated; Free Cable and HBO; Seasonal Pool; Coffee Maker; Iron/Board; Hairdryer; Jacuzzi Suites Available; Free Continental Breakfast; Data Ports Available in All Rooms; Wireless High-Speed Internet. NO PETS ALLOWED.



FAIRFIELD INN & SUITES

I-65 Exit 121; 362 Brenton Way; Shepherdsville, KY 40165
(502) 955-5533 (888) 236-2427 FAX: (502) 955-5547
64 Units; Free Cable; Refrigerators & Microwaves in each room. Coffee Maker; Hairdryer; Iron/Board; Seasonal Pool and Whirlpool; Jacuzzi Suites Available; Guest Laundry; Free Continental Breakfast; Meeting Room (50); Data Ports and Wireless High-Speed Internet Available in All Rooms Outdoor grilling area. ADA rooms available. Well lit desk area. Non-smoking hotel. NO PETS ALLOWED.



HAMPTON INN

I-65 Exit 121; 180 Willabrook Dr., Brooks, KY 40109
(502) 957-5050 (800) 426-7866 FAX: (502) 957-3315

64 Units; Seasonal Pool; Whirlpool Rooms Available; Coffee Maker; Hairdryer; Iron/Board; Microwave; Refrigerator; LCD TV; Exercise Facility; Free Continental Breakfast; Data Ports and High-Speed Internet Available in all Rooms; Meeting Room (10). AAA, AARP, Corporate & Military Discounts. NO PETS ALLOWED.



GARDEN INN & EXTENDED STAY

I-65 Exit 117; 130 Lakeview Dr., Shepherdsville, KY 40165
(502) 543-3011 (800) 329-7666 FAX: (502) 543-6161

105 Rooms; AAA, AARP and Military Discounts; Free Continental Breakfast. One-Site Restaurant; Cable TV and HBO, Free Local Calls, Seasonal Pool; Hairdryer; Iron/Board; Microwaves and Refrigerators in most rooms; Non-Smoking Rooms Special Group Rates Available. Wired & Wireless Internet: \$10.00 Pet Fee.



HOLIDAY INN EXPRESS

I-65 Exit 121; 365 Brenton Way, Shepherdsville, KY 40165
(502) 955-4984 (800) 465-4329 FAX: (502) 955-4985

67 Units; Three-Star Rated Property; Free Cable TV and HBO; Indoor Pool; Coffee Maker; Microfridge in All Rooms; Iron/Board; Hairdryer; 32" Plasma TV; Jacuzzi Rooms Available; Continental Breakfast; Fitness Center; Guest Laundry; pet friendly; Wired/Wireless Internet; Business Center



SUPER 8

I-65 Exit 117; 275 Keystone Crossroad, Shepherdsville, KY 40165
(502) 215-4762 (800) 800-8000 FAX: (502) 921-2123

57 Units; Indoor Pool; Super Starter Breakfast; Free Local Calls; Microwave; Refrigerator; Iron/Board; Executive Suites Available; High Speed Internet Available in All Rooms. \$10 PET FEE



MOTEL 6

I-65 Exit 117; 144 Paroquet Springs Dr., Shepherdsville, KY 40165
(502) 543-4400 (800) 466-8356 FAX: (502) 543-8972

98 Units; Three Star AAA Rated; AARP Discount; Seasonal Pool; King-Sized Rooms Available; Guest Laundry; Microwave and Refrigerator Available; Free Cable TV, HBO and ESPN; Free WiFi internet - All rooms newly renovated. Free Coffee Served 7:00 a.m. – 10:00 a.m.; Data Ports Available in All Rooms; One Pet Per Room.



QUALITY INN & SUITES

I-65 Exit 121; 716 Brooks Hill Rd.; Brooks, KY 40109
(502) 955-6272 (800) 228-5151 FAX: (502) 955-5911

75 Units; Whirlpool and Jacuzzi Suites; Free HBO in All Rooms; Indoor Swimming Pool; King-Size Rooms; Coffee Maker; Refrigerator and Microwave; Free Continental Breakfast; laundry service, fitness service. Data Ports and High Speed Internet. NO PETS ALLOWED.



COMFORT INN

I-65 Exit 121; 191 Brenton Way, Shepherdsville, KY 40165
(502) 955-5566 FAX: (502) 955-5588

79 Units;.. Meeting and Party rooms are available. Our beautiful new and completely remodeled Comfort Inn features great guest service, complimentary

Comfort Sunshine Breakfast, Micro/Fridge in all rooms, expanded cable and 32 inch flat screen tv, 24 hour Business Center, Guest laundry, wireless internet, in room coffee maker, iron and board, Work Stations, Specialty Family Suites available NO PETS ALLOWED



KOA-LOUISVILLE SOUTH

2433 Hwy 44 East; Shepherdsville Ky 40165
502-543-2041

90 ft. pull through; 50-amp sites; one or two bedroom camping cabins; deluxe cabins; outdoor movie screen.



GRANDMA'S RV CAMPING

159 Dawson Drive Shepherdsville, KY 40165
502-543-7023

Family owned; pull through and back in spaces; Full hookups

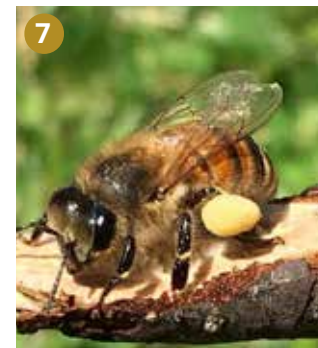
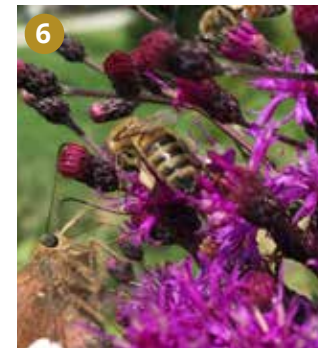
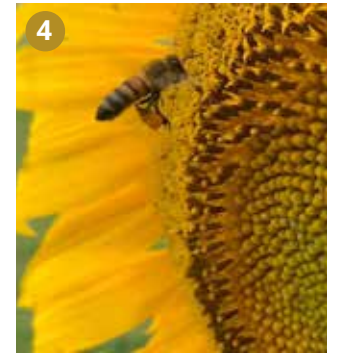
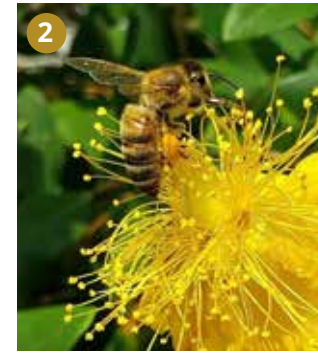
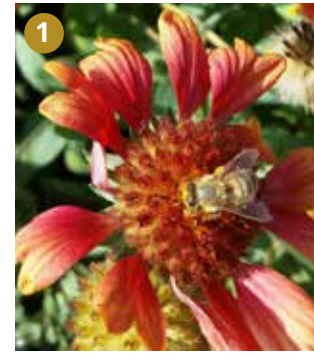
COMMUNITY BUZZ



Pollen Identification

by Linda Mizer

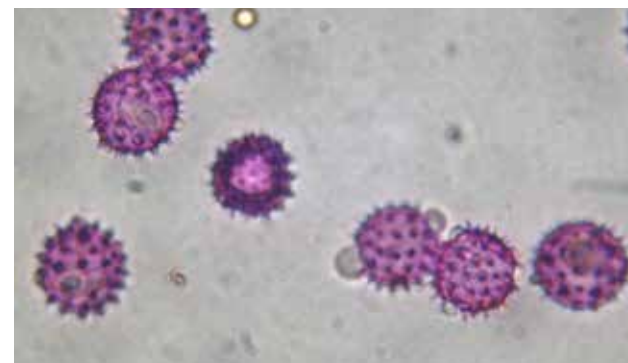
Many thanks to all those in Kentucky who shared their favorite images of pollen-laden honey bees on a wide variety of blooms – even just hanging out for a short break! As summer approaches and the cool grip of a wet spring is fading from memory, it is wonderful to see the bees visiting all manner of blooming plants. As we prepare to visit Kentucky August 11-13th I can hardly wait to see the local blooms and their pollinators. We all learn something from each sighting of a honey bees on a plant, - not only a realization of the scope of plants they visit, but also the variety of native pollinators that share in foraging. Surely, we are appreciative of “Beeing Connected”.



1. *Gaillardia pulchella* (Indian blanket)
2. *Hypericum perforatum* (St. John's Wort)
3. *Trifolium repens* (white clover)
4. *Helianthus annuus* (sunflower)
5. Hardin County Beekeepers
6. *Vernonia fasciculata* (ironweed)
7. Resting bee
8. *Rosa multiflora* (wild multiflora rose)
9. *Cydonia oblonga* (quince)
10. *Taraxacum officinale* (dandelion)



PHOTO CREDITS: 1. Dena Fitzpatrick, 2. Dennis Raven, 3. Duran Byant, 4. George Bissias, 5. Hardin County Beekeepers, 6. Kevin Karma, 7. Kevin Karma, 8. Myra Teal, 9. Rick Sullivan, 10. Terence Spradlin



POLLEN CREDIT: Images courtesy of Science & Plants for Schools, found at <http://www.saps.org.uk>

Helianthus annuus is a sunflower with distinctively spiky pollen grains. It is native to dry plains, prairies, meadows and foothills in the western U.S., Canada and northern Mexico. It is a coarse, hairy, leafy, fast-growing annual that typically grows 5-10' tall on stiff upright stalks and also grows as a weed in farming fields and pastures. Sunflowers are now cultivated across the US and serve as an important source of edible oil and feed.

EAS BUSINESS

EAS Board of Director's Spring Meeting Minutes

Via Zoom, March 7, 2021

Call to order

The meeting was called to order by Lou Naylor at 7:00 PM.

Roll Call

Those in attendance were: Lou Naylor, Chairman; Linda Mizer, Vice Chairman; Dr. Leonard Davis, President; Ben Carpenter, Vice President; Doris Morgan, Secretary; Mary Duane, President Emeritus; Erin MacGregor Forbes, Chairman Emeritus; Marilyn Parker, Alabama; John Baker, Connecticut; Bob Bauer, Delaware; Carin Zinter, Massachusetts; Michael Sautter, Michigan; Dorinda Priebe, New Hampshire; John Gaut, New Jersey; Burton Beasley, North Carolina; Jeannie Saum, Ohio; Vincent Aloyo, Pennsylvania; Nancy Simpson, South Carolina; Karla Eisen, Virginia; Thomas Nolan, Ontario; Keith Inglin, Webmaster; Debby Delaney, MB Advisor; Tammy Horn Potter, Honey Bee Health Coalition; Steve Repasky, Master Beekeepers; Bob Talkiewicz; Dan Borkoski; Brutz English; and Janet Anker

Those Absent were: Jacky Hildreth, Treasurer; Kevin Platte, District of Columbia; Roger Blanco, Florida; David Hocutt, Indiana; Wesley Card, Louisiana; Patti Wong, Maryland; Cindy Holt, Rhode Island; Sam Golston, West Virginia; Julie Fontaine, Quebec; Albert Chubak, Historian; Jim Bobb, Life Membership; George Wilson, Honey Show committee; Eric Brown, Wild Apricot Lead

States/Provinces in good standing

In order for a Director to be able to vote their State/Provincial dues need to be paid.

Alabama, Connecticut, Delaware, Georgia, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Vermont, Virginia, West Virginia, District of Columbia, Ontario

States/Provinces with expired dues

Florida, Illinois (vacant), Michigan (vacant), Mississippi (vacant), Rhode Island (vacant), Wisconsin (vacant), Canadian Maritime (vacant), Quebec (vacant)

Election of New Directors

- Georgia – Brutz English
- Maine – Janet Anker

John Baker made a motion to accept Brutz English as Director of Georgia, Marilyn Parker seconded the motion. All were in favor of the motion. Erin MacGregor Forbes made a motion to accept Janet Anker as Director of Maine, Vincent Aloyo seconded the motion. All were in favor of the motion.

Secretaries report

The minutes from the November 8, 2020 and the emergency meeting on January 31, 2021 were sent out by email for review. John Baker made a motion to accept the minutes, Mary Duane seconded the motion. All were in favor of the motion.

Treasurer’s report

This was sent out prior to the meeting by email. Jacky was not in attendance for discussion.

Chairman’s Report

The conference is coming along well. The speakers are lining up. The speakers from Massachusetts can’t come because of COVID restrictions in their states but we have some great replacements. Linda and Lou will be visiting the conference center next week and checking out the local hotels and blocking out rooms to be reserved for conference goers. Registration will be limited to 300 people, not including the vendors. We will open up first to people taking the Master Beekeeping exam and the Master Beekeepers testing them, known volunteers, speakers, BOD members, and life members. These people will be notified first that they can register, then it will be opened up to current members before being announced to the general public. Lou asked the BOD members to step up during the conference to help out where ever needed. When you signed up as a director as part of your duties you are asked how you would like to volunteer. There are some committees that could use some help, if you have an interest in an area, please reach out. Send either Lou or Doris an email. We are not doing a hybrid conference. We hope to record the speakers that agree to it and put this in a members only section on the website. The auction we hope to have a mix, some on line and some live. The auction team is working on this. Ben, who has been our auctioneer for the last 2 years said he will come down and do it again for us. Only 1 social event can be held this year, that

will be on Friday night. It will be a Kentucky BBQ, along with the auction and giving out of the awards.

Presidents Report (EAS 2021) – Dr. Leonard Davis

The location is Sheperdsville, Kentucky. It is about 12-15 miles south of the Louisville International Airport off Interstate 65. Sheperdsville is a small town, with 2 hotels (Comfort Inn & Suites and Sleep Inn) very close to the conference center and more about 6 miles north of there. These will all be listed in the upcoming journal. There are several restaurants in the area, some within walking distance. The conference center has a good size parking area along side of it. At this point we are going to get 3 big rooms, one of which is the ballroom. There will be another room for the vendors and another section for the Master Beekeepers. There is an area outback where the apiary will be set up. Lou said that we will be only having 2 tracks this year, one in doors and 1 outdoors. Things to do in the evenings include a tour of the Jim Beam Distillery, Burnheim Forest Arboretum, and an outdoor drama for which registration is needed far in advance. There is no flyer made yet, that is being worked on by Linda and will be sent out to the Directors.

Future Sites

- 2022 – New York
- 2023 – Massachusetts

John Baker made a motion to accept Mary Duane as President for 2023, Erin MacGregor Forbes seconded the motion. All were in favor of the motion. Mary said that they are planning on the same location.

Committee And Other Reports

Committee Openings

Lou stated that there are openings on the committees. If you are interested to volunteer for a spot, please email either Lou or Doris Morgan. Karla stated that there used to be an Education Committee, this would be a good one to revive. Train the Trainer was a class given by the committee at past conferences. Vince said he was on it, but it just dissolved. Page 55 of the Policy and Procedure manual lists information about the Education Committee. Tammy said this committee would be helpful to the person running the children’s program during the conference to know who to reach out to. Jeannie Saum volunteered to help with the Education committee.

Historian

Albert Chubak has been the historian, he has not been able to attend any meetings or do anything. He had an accident, and then moved to Canada. Lou will begin actively looking for a historian. Erin has the stuff in the attic of her cottage. This would be a good project for someone who is an organizer. Tammy stated that this should be a committee and not just one person as it is a lot and that they should submit once a year something to Linda to go in the Journal. She said she would be on the committee but not the chair position. Erin said that if someone else would chair it, she would be willing to be on it too. Erin stated that this would be a good job for a new Master Beekeeper to take on. Steve Repasky stated that he would pass this on to them.

Honey Bee Health Coalition – Tammy Horn Potter

The Honey Bee Health Coalition Hive Health subcommittee members have been working on a document for commercial beekeepers, which offers alternatives to amitraz so the varroa mites will not build resistance to this control. The document was sent to reviewers for critique and comments. The committee is working to incorporate suggestions. EAS will renew its Honey Bee Health Coalition membership. After brief discussion, Erin reminded the EAS Board approved that membership expense several years ago and that it is ongoing. It does not have to be approved every year any more.

Awards

Hambleton Award 2021 – Juliana Rangel
Roger A. Morse Award 2021 – Jamie Ellis, University of Florida
Student Award 2021 – Abigail Chapman, University of British Columbia
Honey Bee Research Grant 2021 –

Dr. Alison McAfee \$10,000 for researching the influence of abiotic stressors on the queen gut microbiome.

Ed Levi \$1345.00 for a project to determine if developmental times of Apis mellifera unicolor is a natural deterrent to the development of Varroa mites in Madagascar.

Divelbiss – Award letters were just emailed for the second time to the Board of Directors

Mann Lake EAS Scholarship – Award letters were just emailed for the second time to the Board of Directors

Honey Show Advisory Committee – Karla Eisen

Carla stated that they have been meeting in the fall, they have completed a set of judging guidelines and are trying to codify the policies and procedures in writing. Mark Fiegl will be the honey show chair for next year in New York. Chris in Massachusetts will be the honey show chair for 2023. Thank you to Jacky for having the Honey show display materials moved by BetterBee to Mark Fiegl’s barn in New York. There is no honey show for 2021. Members on the committee are: Mike Palmer of VT, Bob Wellemeyer of VA, Jennifer Holmes of FL, Karla Eisen of VA, George Wilson of VA, Mark Fiegl of NY and Chris Rogers of MA.

Journal – Linda Mizer

The draft of the Journal went out today to be proofed. Hopefully the final draft will go out later this week to the publisher. The next journal may be in late May. Any director that would like to get information about their State meetings in the Journal, please send the information to Linda. Lou stated that all the Directors are getting a hard copy of the Journal to use to push EAS to their groups. Send pictures to Linda of bees with their pollen sacks filled and/or their bee yard set ups.

Master Beekeepers – Steve Repasky

Looking at having a Volunteer dinner in Kentucky. Landi said there are 7 new candidates, and 10 retakes. He should be ok on volunteers.

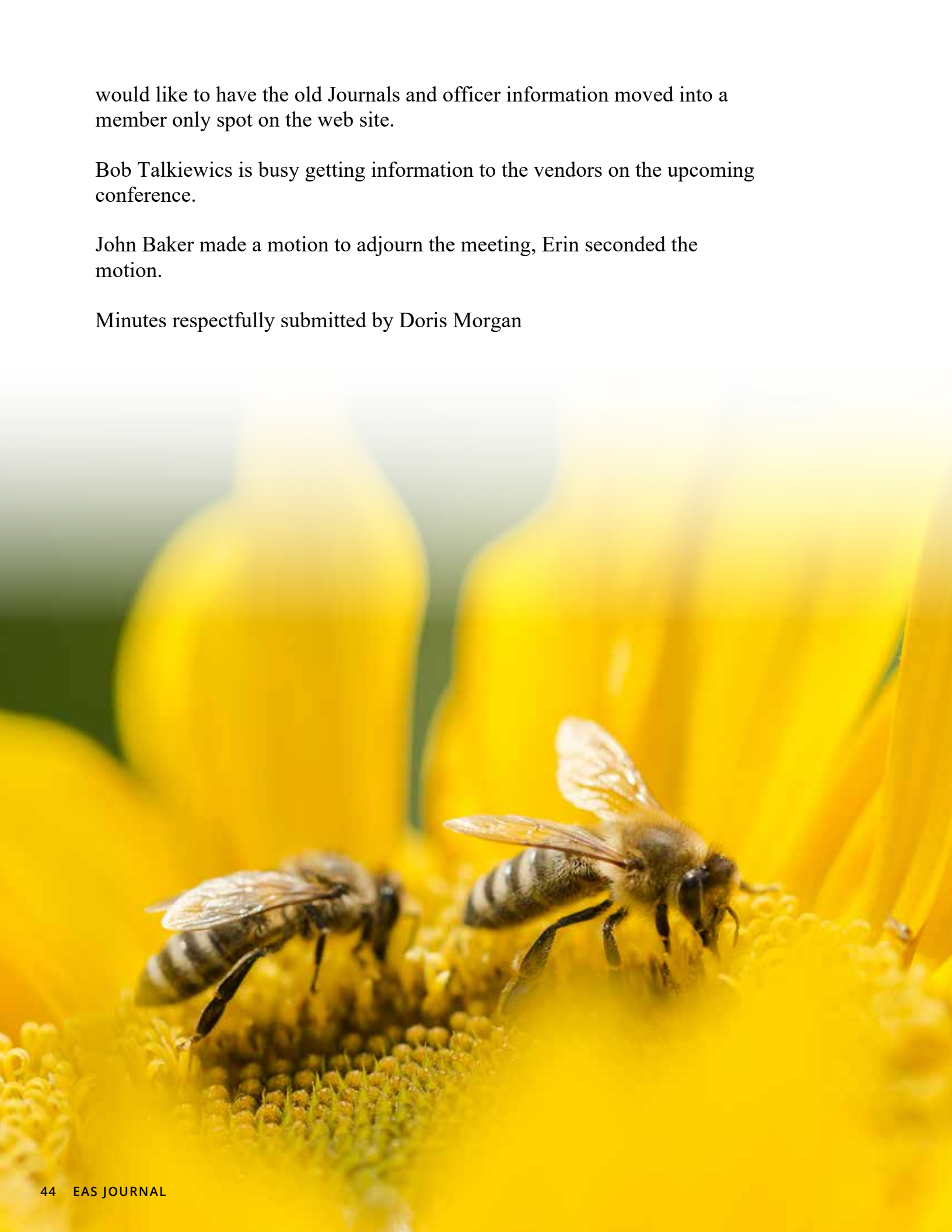
Membership Committee – Bob Bauer

Active members 1,007 total
296 1 year memberships
87 2 year memberships
94 3 year memberships
10 Corporate memberships
493 Life member
27 State Associations

They are working on increases in memberships, not ready yet to discuss it. Lou stated that it is a modest increase in dues. Since it is not ready the board will be emailed to get a vote so that it can be voted on at the conference by the general membership.

Website – Keith Inglin

The person who was going to work with Keith on updating the web site is very busy at work right now and doesn’t have the time to work on it. Keith stated that once John is done, he should be able to populate it quickly. Lou



would like to have the old Journals and officer information moved into a member only spot on the web site.

Bob Talkiewics is busy getting information to the vendors on the upcoming conference.

John Baker made a motion to adjourn the meeting, Erin seconded the motion.

Minutes respectfully submitted by Doris Morgan

EAS Proposal for Increase in Membership Dues

The EAS Board of Directors voted unanimously to increase the membership dues for EAS beginning January 01, 2022. Since 2006 the annual individual dues have been \$25 per year. The cost of running this organization with software dues, paper journal costs, credit card fees, insurances, and accounting costs have all gone up considerably since 2006. Annual membership has recently declined, primarily due to the cancellation of the conference in 2020, causing a loss of approximately 10,000 dollars. Our proposal for Individual/Family memberships are listed, below. Anyone that would like delivery of a paper journal may request one for a flat fee of \$20 per year, which would help in deferring the costs of production and mailing.

Respectfully submitted,
Finance Committee

CURRENT PRICING	PROPOSED PRICING Electronic Journal		Total Investment
1 year Individual/Family (Paper Journal or Electronic delivery); \$25	1 YEAR INDIVIDUAL		
	Individual Membership includes up to 4 household members	\$35.00	\$35.00 yr
2 year Individual/Family (Electronic delivery); \$45	2 YEAR INDIVIDUAL		
	Individual Membership includes up to 4 household members	\$65.00	\$32.50 yr
3 year Individual/Family (Electronic delivery); \$65	3 YEAR INDIVIDUAL		
	Individual Membership includes up to 4 household members	\$90.00	\$30.00 yr
Life Membership (Electronic delivery); \$250	LIFE MEMBER		
	Life Membership includes 2 persons in the same Household	\$350.00	
Association (State/County/Regional) \$50 annually	ASSOCIATION		
	Single Association + Journal and Conference Program	\$50.00	\$50.00
Corporate Membership is \$50 annually	CORPORATE MEMBERSHIP		
	Up to 4 Persons as Corporate Members	\$75.00	\$75.00

MAILED JOURNALS	
3 Journals	\$20.00/year

EAS Executive Committee, Directors, and Contacts

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