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Philip McCabe, President
International Federation of Beekeepers Association

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BVP™ HAS BEEN FIELD TESTED BY:
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AT A GLANCE

Sunday
  Registration and Information Desk 4:00–7:00 pm
  EAS Board Meeting 5:00 pm

Monday
  Registration and Information Desk 7:30 am–4:00 pm
  Short Course 8:30 am–to 5:00 pm
  St. George's Brewing Company Tour 6:30–9:00 pm

Tuesday
  Registration and Information Desk 7:30 am–4:00 pm
  Short Course 8:30 am– 5:00 pm
  Vendor Exhibit 10:30 am–5:00 pm
  Honey Exchange Drop Off 12:00-5:00 pm
  Honey Show Entry Drop Off 3:30-5:00 pm
  Miss Hampton II Harbor Cruise 6:30-9:00 pm

Wednesday
  Registration and Information Desk 7:30 am–4:00 pm
  Honey Show Entry Drop Off 8:15-11:15 am
  Honey Exchange Drop Off 8:00 am-3:45 pm
  Conference 8:15 am-3:45 pm
  Vendor Exhibit 8:15 am–3:45 pm
  Beekeeper Beach Bash & Barbeque 4:00-8:00 pm
  Queen of the Sun Movie Screening 7:30-9:00 pm

Thursday
  Registration and Information Desk 7:30 am–4:00 pm
  Jamestown Field Trip 8:00 am-4:45 pm
  Honey Exchange Drop Off 8:00 am-5:15 pm
  Conference 8:15 am–5:15 pm
  Vendor Exhibit 8:15 am–5:15 pm
  Silent Auction 2:30-6:00 pm
  Tea with Celia 4:00-5:00 pm
  Social with Cash Bar 5:00 pm-9:00 pm
  Dinner and Honey Show Awards 6:30-8:00 pm
  Live Auction 8:00-9:30 pm

Friday
  Registration and Information Desk 7:30 am–12:00 pm
  Conference 8:15 am–5:15 pm
  Vendor Exhibit 8:15 am–4:15 pm
  EAS Membership Meeting 11:15 am–12:00 pm
  Honey Exchange Pickup 12:30-4:00 pm
  Social with Cash Bar 5:00 pm-9:00 pm
  EAS Annual Banquet 6:30–9:00 pm
Greetings fellow beekeepers!

Welcome to Hampton, Virginia, one of the first English settlements in the New World and America’s oldest continuous English-speaking town. Who would have thought, when honey bees were first transported to Virginia from the Old World, kept dormant by the cold below the water line in a ship’s hold, that hundreds of beekeepers would converge on the same area almost 400 years later to spend a week learning more about them. Much has changed in what we know about honey bees but one thing is virtually unchanged - the bees themselves and their habits. Bees may be referred to as managed versus feral but we beekeepers know the difference is only one swarm apart. I believe that is part of the attraction of keeping bees, the glimpse it allows us into the lives of wild animals and the concentration one must apply to make that glimpse a pleasant one. I’ve often told people that beekeeping is like meditation, you must be mindful in your actions, so much so, that it is difficult to think of anything outside the colony. I refer to it as my “bee therapy” and trust that some of you are nodding your heads in agreement, thinking of how the cares of the world evaporate once you are immersed in your bees.

Beekeeping has allowed me to connect with many people I would never have met otherwise. Good people who appreciate the interconnectedness of life and live within the rhythm of the seasons. Bees ground us to the earth, much like farmers, for we are often dependent on the weather for our bees’ survival. It is humbling. It is exhilarating. And it builds a community like no other. I am grateful to be a part of our beekeeping community and honored to have been able to serve all of you this past year planning our 2018 EAS Short Course and Conference. I hope you will find the speakers engaging, the social activities entertaining, and the entire event worthwhile. It was an incredible team effort that still amazes me with its complexity. I owe a debt of gratitude to all the volunteers who made EAS 2018 possible; please accept my sincere thanks for your hard work, time, and enthusiasm. And to those of you here to enjoy what we’ve been working on all year: Welcome to Virginia, where it all began!

Sincerely,
Pam Fisher
President, Eastern Apicultural Society, 2018
President Emeritus, Virginia State Beekeepers Association
Chesapeake, Virginia
Welcome to Virginia, the entry point of honey bees to North America!

We are so happy to have this opportunity to share and learn together. This year our program has a very diverse group of speakers from the US and abroad, and we are thrilled to have several UK speakers on our program.

As you can see from the program schedule (starting on page 32) we have another amazingly robust program this year, with multiple levels in the short course including queen rearing with the Russian Queen Breeder program, an electronic hive monitoring track and more. I am particularly excited to highlight the excellence in hive products track of the short course, which encourages us all to improve our honey production and other hive product skills – something we can always learn to improve and expand.

We are looking forward to an exciting week of education, skill building and knowledge sharing. We hope you will find lots of time to meet people, make new friends, and catch up with colleagues.

I hope you will attend as many of the special events as you possibly can. These events provide an opportunity to meet fellow beekeepers at all levels, make new friends and lasting connections, and share some laughs and good times. After a long day of learning in the classrooms and apiary, what could be better than to unwind with new friends? The Thursday night social and auction is always my favorite, and we have some amazing items in another fast-paced auction this year. The Friday night Banquet awards will be great fun and will announce the certification of new EAS Master Beekeepers that evening. We have another very strong group of candidates this year, we applaud and encourage all candidates as they pursue certification.

Please also accept and convey my deep appreciation for all of the volunteers who make this week possible. EAS is a volunteer run organization from top to bottom, and there are many people have been working hard to make this week happen for two and three years, or more! Pam Fisher, Karla Eisen and their team have been an amazing group to work with, the Executive Committee and Board of Directors are critical participants, and of course the Master Beekeepers have been working hard behind the scenes to make Eastern Apicultural Society one of the greatest beekeeping organizations anywhere. Thanks to all of you who have participated, and if you are new to EAS and wanting to get involved, please get in touch with any member of the Board and we will be happy to help you find a role that fits your qualifications and interest.

My very best to all of you and your bees, and most of all, enjoy EAS 2018!

Erin MacGregor-Forbes
Chairperson, Eastern Apicultural Society
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## SCHEDULE OVERVIEW  
Sunday, August 13 to Friday, August 17, 2018

### Registration and Information Desk

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>4:00 pm - 7:00 pm</td>
</tr>
<tr>
<td>Monday</td>
<td>7:30 am - 4:00 pm</td>
</tr>
<tr>
<td>Tuesday</td>
<td>7:30 am - 4:00 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>7:30 am - 4:00 pm</td>
</tr>
<tr>
<td>Thursday</td>
<td>7:30 am - 4:00 pm</td>
</tr>
<tr>
<td>Friday</td>
<td>7:30 am - Noon</td>
</tr>
</tbody>
</table>

### Master Beekeeper Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Day</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet and Greet Candidates</td>
<td>Monday</td>
<td>1:30 pm -2:30 pm</td>
<td>Conference D</td>
</tr>
<tr>
<td>Pre-Exam Q&amp;A</td>
<td>Monday</td>
<td>2:30 pm -4:30 pm</td>
<td>Conference D</td>
</tr>
<tr>
<td>Volunteer Dinner</td>
<td>Monday</td>
<td>5:30 pm -7:30 pm</td>
<td>TBD</td>
</tr>
<tr>
<td>Candidate Written Exam Group Study</td>
<td>Monday</td>
<td>7:00 pm -9:00 pm</td>
<td>Conference D</td>
</tr>
<tr>
<td>Written Exam</td>
<td>Tuesday</td>
<td>8:30 am -12:30 pm</td>
<td>Room 208</td>
</tr>
<tr>
<td>Master Beekeeper Administration</td>
<td>Tuesday</td>
<td>Open All Day</td>
<td>Room 211</td>
</tr>
<tr>
<td>Oral Exam</td>
<td>Tuesday</td>
<td>8:00 am -4:40 pm</td>
<td>Room 209, 210, (30/class)</td>
</tr>
<tr>
<td>Lab Exam</td>
<td>Wednesday</td>
<td>8:30 am -12:30 pm</td>
<td>Conference D</td>
</tr>
<tr>
<td>Field Exam</td>
<td>Wednesday</td>
<td>10:00 am – 4:00 pm</td>
<td>Apiary</td>
</tr>
<tr>
<td>Master Beekeeper Annual Meeting</td>
<td>Friday</td>
<td>7:30 am – 8:30 am</td>
<td>Conference Room D</td>
</tr>
<tr>
<td>Exam Results Review (Candidates receive scores and get questions answered.)</td>
<td>Friday</td>
<td>2:00-5:00 pm</td>
<td>Ballroom A</td>
</tr>
</tbody>
</table>

### Society Meeting Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Day</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAS Board of Directors’ Meeting</td>
<td>Sunday</td>
<td>5:00 pm</td>
<td>Board Room A of HRCC Administration Offices</td>
</tr>
<tr>
<td>Life Members Banquet</td>
<td>Thursday</td>
<td>12:00 pm -1:30 pm</td>
<td>Embassy Suites Mercury Ballroom</td>
</tr>
<tr>
<td>Welcome to EAS - Buddy May</td>
<td>Friday</td>
<td>11:00 am-11:15 am</td>
<td>Ballroom ABC</td>
</tr>
<tr>
<td>EAS Annual Meeting</td>
<td>Friday</td>
<td>11:15 am-noon</td>
<td>Ballroom ABC</td>
</tr>
</tbody>
</table>

### 2018 Annual Honey Show Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Room</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop Off Show Entries</td>
<td>201-202</td>
<td>Tuesday 3:30 pm - 6:00 pm</td>
</tr>
<tr>
<td>Drop Off Show Entries</td>
<td>201-202</td>
<td>Wednesday 8:00 am - 11:15 am</td>
</tr>
<tr>
<td>Show Open</td>
<td>201-202</td>
<td>Thursday 10:30 am - 5:00 pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8:00 am - 3:00 pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note that some entries will be auctioned off Thursday evening and will not be on display Friday</td>
</tr>
<tr>
<td>Silver Awards Presentation</td>
<td>Ballroom BC</td>
<td>Thursday During Evening Dinner</td>
</tr>
<tr>
<td>Post-Show Pickup of Entries</td>
<td>201-202</td>
<td>Friday 3:00 pm - 5:00 pm</td>
</tr>
</tbody>
</table>
SPONSORS OF THE 2018 EAS CONFERENCE

Not only do we want to thank those people, businesses and organizations that support the 2018 program but also appreciate the value in products and information that they bring to the experience. Their participation enriches our knowledge of what services and products are out there. Please make sure you let them know how much you appreciate their part by supporting them and letting them know you are glad they are part of this.

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David Meldrum

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Phyllis Clements
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Lori Hawkins
William Meikle
William Miller
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Bee Culture Magazine
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Gamber Container
Hackenberg Apiaries (Buffy Bee Farm)
Maine State Beekeepers Association
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Virginia Department of Agriculture and Consumer Services

**KEYNOTE SPEAKER**
Virginia State Beekeepers Association

**LANYARDS**
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**SHORT COURSE**
ApiSolutions Consortium
Russian Honey Bee Queen Breeders Association
Veto-Pharma

**SHORT COURSE BREAK**
Central Virginia Beekeepers Association
The New Jersey Beekeepers Association

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A busy group of EAS attendees you don’t see much of at the annual conference are the individuals taking the EAS Master Beekeeper Certification exams, along with MB involved in doing the testing and exam grading. Last year we had a record 27 individuals taking the examinations. This year there are 30 candidates. These individuals, from 12 EAS states and beyond (all the way to Australia, but curiously lacking a Virginia beekeeper participant), have 4 tough exams to take Tuesday and Wednesday. Ten test takers have already passed one or more exams and need only re-take some of the exams.

The purpose of the EAS Master Beekeeper program is to certify individuals who have accumulated detailed knowledge of honey bee biology and expertise in the proper practices of beekeeping. Equally important, EAS MB individuals are tested on their ability to present this information on bees, beekeeping, pollination and bee products to both the beekeeping and non-beekeeping public in an accurate, clear and authoritative manner. A Master Beekeeper Certificate signifies competence at a college level in beekeeping and knowledge and expertise in handling/manipulation of bee colonies.

The EAS MB program is the oldest of a growing number of Master Beekeeper programs across the U.S. The EAS Master Beekeeper program began as a Cornell University beekeeping outreach of Dr. Roger Morse in 1976. A total of 27 NY beekeepers were certified between 1976 and 1979. Certification was transferred to EAS and in the first “class” [1981 at the Rutgers (NJ) EAS conference] 8 additional individuals were certified. Numbers certified have varied over subsequent years. Last year 10 new MBers were certified in Delaware. Currently there are over 150 active EAS MBers.

The EAS MB program differs from the newest state MB programs in that it doesn’t include training or intermediate levels of certification. We rely on state and association educational programs and mentoring to prepare candidates. Many applicants are leaders of local/state associations and involved in teaching/mentoring of fellow beekeepers.

When Dr. Morse invited EAS to take on this annual certification he wrote: “One does not need to pass such an examination to be a successful beekeeper or to teach a successful course in beekeeping …However we do urge those teaching beekeeping to get involved in the program.” The EAS MB tests are a validation, an expression of dedication to learning bees and beekeeping.

The testing process is not open to non-test takers; registration closed July 1. There is an open public review session on Monday and the exam review on Friday is public as well. You can review past exams on the EAS website and view suggestions on how to prepare for the exams. Exams are offered annually only at the EAS Conference. Additionally Phil Frank of Montgomery Co (MD) Beekeepers Association, the local association with the greatest concentration of EAS MBers, has developed an interesting MB quiz on the website: https://montgomerycountybeekeepers.com/quizzes/

So if you see one of the 2018 test takers wish them success. Ask how tough the exams were. If interested, speak with a current EAS MBer (they will have name tag ribbons) and maybe even consider taking the challenge toward becoming an EAS Master Beekeeper.
RANDY OLIVER

Our Keynote speaker Randy has kept bees for over 40 years, most of his life. He views beekeeping through the eyes of a biologist, researcher, and nature lover. Along with two grown sons, Randy owns and operates a small (~1000 colonies) commercial beekeeping enterprise in the foothills of The Sierra Nevada Mountains at mid-elevation in Grass Valley (outside Sacramento) in Northern California. The bees are moved to almond pollination to start the year and then moved to the mountains to produce queens, nucs, and in some years, even honey.

Randy holds B.S. and M.S. degrees in Biological Sciences. However, he is better known for his research, analyses, and digestion of beekeeping information from all over the world. He clearly and precisely summarizes current scientific research so as to help beekeepers plan their management strategies for colony health. Randy bases his comments on his own observations, his extensive communication with other researchers and beekeepers, and on field research with his own colonies.

Randy uses his own bees for his experiments. He relies on contributions from beekeepers and very limited grant funding in order to not only broaden his own depth of understanding and knowledge, but to develop practical solutions to many of today’s beekeeping problems. Randy readily and immediately shares his findings and insights with other beekeepers through his various articles in bee magazines, his speaking engagements worldwide, and on his website: www.ScientificBeekeeping.com.

The Rhode Island Beekeepers website explains his bee contributions thusly: “Open any issue of American Bee Journal and you’ll be sure to find articles written by Randy about scientific beekeeping. Randy’s practical adventures and often light hearted writings explore the topics that perplex us the most. Do natural methods work to control mites? What is good bee nutrition? Are essential oils effective? Can one apply methods practically for two or five hives? How about 25 hives? Or for 100 or more hives? Randy is an entertaining and informative speaker. Randy practices what he preaches! He operates an apiary in California offering pollination services and all of the products we normally produce ourselves. He deals with the same problems that we do day-in and day-out. Come and learn from this science-minded practical expert who puts natural practices within our reach.”

Randy will give his Keynote to start our conference on Wednesday morning on Varroa adaptions and Oxalic acid. Wednesday afternoon he will do a workshop discussion on Pesticide and neonicotinoids, another on Thursday afternoon (Tips for Handling Bees) and on Friday Reading Combs workshop.

Compiled by Dewey M. Caron
CELIA DAVIS

Celia Davis lives in a small village of Berkswell, near Coventry off the M1 half-way between London and Liverpool in an area called the Midlands, the heart of England. Celia has a Degree in Agriculture, was a biology teacher and lecturer. She is one of only 90 English beekeepers with a National Diploma in Beekeeping (NDB).

Celia has followed a lifelong interest in insects and has been keeping bees since 1992. She once managed more than a dozen hives but has now reduced the number and keeps only a half dozen.

Celia has held various posts within the Warwickshire Bee Association, including serving as Secretary (11 years) and then as President. Celia is a popular teacher of beekeeping at various levels and lectures widely throughout the British Isles and Ireland. She has been a tutor for the British Beekeeping Association (BBKA) Correspondence Course and served for six years on the BBKA Examinations Board.

A prolific author of numerous beekeeping articles for Bee Craft she has published two popular books *The Honey Bee Inside Out* and *The Honey Bee Out and About*, both in their 2nd edition. They are widely used to teach new beekeepers and are a must read for those studying for the British Beekeepers’ Association examination modules.

Celia is particularly partial to nucs, using them for various purposes, including swarm control. Her apiary often has as many three, four, and five frame nucs as full colonies during the summer. She practices overwintering some of her nucs.

When she is not involved with bees she enjoys gardening, particularly growing fruits and vegetables, and birdwatching. Her home grounds are a delight to roam through and a strong expression of her love of plants, birds and bees.

Celia will present the 2nd keynote address on Wednesday conference opening on “Sex Life of Plants.” Her workshops will include one Wednesday afternoon on drones (Mr Bee) and a Friday workshop on Pheromones.

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Wyatt Mangum has studied bees for over 50 years. He remembers his first bee meeting at age 10 (of the Richmond beekeepers) attending with his dad. By the time he was in high school, he had 125 standard frame hives and was producing honey by the ton. In 1986, he switched to top-bar hives long before most other beekeepers knew about them.

Dr. Mangum built a 200 top-bar hive operation as varroa became a feature of the beekeeping scene. For 10 years, he moved, by himself, 200 top-bar hives to pollinate cucumber fields in North Carolina. And in most years he produces honey with his top bar hives.

His passion for top bar hives has steadily grown and today he is an internationally known top-bar hive beekeeper and author of the comprehensive book *Top-Bar Hive Beekeeping: Wisdom and Pleasure Combined*. Many know Wyatt also as an apicultural historian, specializing in American beekeeping from 1830-1950. His tales of tracking down beekeeping equipment of the time could fill a book alone. Trips are arranged around the opportunity to look for or check out some of the early equipment. He sees his role as an Apicultural Historian is to provide a perspective that might help others to avoid repeating past mistakes in designing beekeeping equipment. He feels it also helps him keep his top-bar hive equipment and management practical.

Wyatt is a monthly columnist for the American Bee Journal on Honey Bee Biology and Beekeeping History, Dr. Mangum is a highly sought-after speaker, and a world traveler, working with beekeepers in India, Bangladesh, Bolivia, South Africa, Thailand, and Brazil.

Dr. Mangum is also a specialist in photography, a talent brought to his book to produce the many rarely-seen pictures. He worked out the technical aspects of using game cameras in apiaries to photograph nocturnal wildlife around the hives. The most stunning pictures of bee behavior under difficult or delicate conditions, are in his book *Top-Bar Hive Beekeeping: Wisdom and Pleasure Combined*.

Wyatt will complete EAS Keynote presentations on Wednesday conference morning. His title will be “Beekeeping Before the Bee Space: An Early History of American Apiculture Showing Period Hives and Equipment” Wyatt will give 2 presentations in the Short Course (twice on Top Bar hives, once in apiary) and a workshop on Thursday “Hot Bees” (thermal sensing).

Compiled by Dewey M. Caron
Thursday Keynote Speakers

**JAMIE ELLIS**

Dr. Jamie Ellis is the Gahan Associate Professor of Entomology in the Department of Entomology and Nematology at the University of Florida. He has a BS degree in Biology from the University of Georgia and a PhD in Entomology (2004) from Rhodes University in South Africa. After his PhD degree he returned to Georgia for a post-doctoral of 2 years before the Florida position opened.

At the University of Florida (UF), Jamie has responsibilities in extension with additional activities in teaching and research. He has an extremely effective extension program. Efforts include efforts to improve sustainability of beekeeping by recruiting and training new beekeepers and providing cutting-edge educational opportunities for seasoned beekeepers with additional emphasis in educational efforts aimed at helping growers improve crop productivity by adopting and implementing integrated crop pollination practices.

Jamie created the African Bee Extension and Education Program (AFBEE), the UF, South Florida, and Caribbean Bee Colleges, and the UF Master Beekeeper Program. He is a popular and energized speaker, in high demand in Florida, the Southeast and nationally, as well as internationally.

With his teaching program, Jamie supervises PhD and masters students. He currently offers an online beekeeping course.

Jamie has an active research program. Currently, with graduate students and post-doctoral individuals, his lab is involved in over 30 active research projects in three emphasis areas: managed honey bee health and husbandry including nutrition and toxicology; understanding wild honey bee ecology and genetic diversity/structure in an effort to sustain honey bee populations through informed conservation efforts; and integrated crop pollination through investigations of native pollinator ecology and management while improving crop pollination and ecosystem services.

At the 2018 EAS he will give a keynote address Thursday morning discussing bee health (“Why are bees dying and what we can do about it”) along with a 2-part workshop on Wednesday afternoon on “Bee Biology and Bees as a Superorganism” workshop on Thursday.

At the 2018 EAS he will give a keynote address Thursday morning discussing bee health ("Why are bees dying and what we can do about it") along with a 2-part workshop Wednesday afternoon on “Bee Biology” and another Workshop on Thursday afternoon “Bees as a Superorganism the Hive or the Honey Bee”.

*Compiled by Dewey M. Caron*
JULIANA RANGEL

Dr Julian Rangel an Assistant Professor of Entomology at Texas A&M University in College Station, TX. Originally from Colombia, South America, Dr. Juliana Rangel got her BS degree (2004) from the program of Ecology, Behavior, and Evolution at the University of California, San Diego. In 2010 she completed a Ph.D. in the Department of Neurobiology and Behavior at Cornell University in Ithaca, NY, working under the supervision of Dr. Thomas D. Seeley. Her dissertation explored the mechanisms and functional organization of reproductive swarming in the honey bee Apis mellifera. Following her stint at Cornell she joined the lab of Dr. David Tarpy, North Carolina State University, as an NSF Postdoctoral Research Fellow.

Her current research program focuses on the biological and environmental factors that influence the reproductive quality of honey bee queens and drones, the health and population genetics of feral honey bees, and the quality and diversity of floral sources collected by honey bees in developed areas across the country. To support these studies she has obtained grant funding from the United States Department of Agriculture-The National Institute of Food and Agriculture (USDA-NIFA) for studies looking at the effects of agricultural pesticides on honey bee fertility. A second grant from Bayer Crop Science seeks to identify the floral sources foraged by honey bees in four different urban locations in the US. She supervises the USDA-Animal and Plant Health Inspection Service (USDA-APHIS) Bee Informed Partnership/Texas A&M University Tech Transfer Team, which collects and analyzes data regarding the levels of pests and pathogens of commercial honey bee colonies that are owned by Texas beekeepers.

Other support has come from the Texas Beekeepers Association and Texas Department of Agriculture’s Specialty Crops Program. This program seeks to increase the marketability of Real Texas Honey. She has collaborated with Dr. Debbie Delaney and the Delaware program ‘Dare to Bee Honey’ marketing efforts.

Juliana is an active member of the Texas Beekeepers Association and has spoken to numerous beekeeping associations in Texas and across the USA. She teaches two undergraduate courses; ‘Honey Bee Biology’ and ‘Introduction to Beekeeping’, and also ‘Professional Grant Writing’ for graduate students. She is the co-advisor of the Undergraduate Entomology Student Organization and the coach of Texas A&M University’s undergraduate and graduate teams of the Linnaean Games, a quiz bowl-style national competition that tests students on their knowledge of entomology at the regional and national games of the Entomological Society of America (ESA).

In addition to several committees at Texas A&M, including the Department of Entomology’s Graduate Student Forum Committee, and the Graduate Admissions Committee, Juliana is the elected Chair of and serves in the ESA’s Diversity and Inclusion Committee. She was the 2014 President of the American Association of Professional Apiculturists.

Juliana gives a Keynote address Thursday Morning “Behavioral Ecology and Swarming” and two workshops in the afternoon (Taxonomy of Apidae” and “Age Polytheism”.

Compiled by Dewey M. Caron
Friday Keynote Speakers

MICHAEL YOUNG

Michael Young should not be a stranger to any regular EAS attendee. He has been attending as speaker and representative of Northern Ireland nearly every year since his initial EAS conference in 1999.

Michael and wife Rae, live in a Georgian Royal Village in Hillsborough, Northern Ireland. They raised 4 daughters and both are most proud of their beautiful daughters, 5 granddaughters, and 1 grandson.

An executive chef by trade Michael has been an instructor in several culinary institutes. He is frequently called upon to display his culinary skills at EAS meetings. A lover of nature, gardening and photography, he also has a passion for orchids and painting in oils and water colors.

Michael has been keeping bees for over 30 years. He claims to be only the second person in Ireland to use Langstroth hives. He is passionate to teach others how to use the Langstroth, which he calls the best hive in the world, after getting one as a gift. He has tried many hive designs and calls the standardized National hive, the most commonly used hive in England and Ireland, the “worst hive design in the world”. Not one to mince his words, but always doing so with his delightful speech pattern accented in the ‘Queen’s English’. Michael is always most entertaining with his delightful stories. Ask him why he describes beekeeping as contagious and addictive.

Michael's favorite book is *The Buzz about Bees: Biology of a Superorganism* by Jürgen Tautz which Dewey Caron introduced him to. He has since become a good friend of Jürgen, inviting him to Northern Ireland to talk with beekeepers. Most visitors to his part of the world are comfortably entertained by Michael and Rae in their “wee, little cottage” snug in Hillsborough, about 30 minutes from Belfast. The “lucky” visitors might even get to sit on the Queen’s throne at Hillsborough Castle, where Michael helps the castle beekeeper with the colonies maintained in the royal gardens.

Michael founded the Institute of Northern Ireland Beekeepers in 2000, modelled on the Young Harris Beekeeping Institute. In addition to EAS, he frequently returns to Young Harris where he introduced and continues to instruct individuals in the Welsh Honey Judge Program, something he helped initiate in England and which he started at the Young Harris Beekeeping Institute in 2000. He is a Georgia Master Beekeeper.

Michael is a certified International Senior Honey Judge and expert showman in exhibiting beekeeping products across the world. He has collected over 800 event awards for his skill. He is skilled in many areas of apiculture including beeswax encaustic painting, wax items and mead making.

In 2008 Michael was awarded the title of Member of the Order of the British Empire, MBE, for his services to apiculture and conservation.

Michael will offer his Keynote address on Friday on Perspectives of Honey Bees in UK and US. In addition to Short Course talks he will do a workshop Thursday on Judging a Honey show.

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The Roger A. Morse Outstanding Teaching/Extension Service/Regulatory Award Supported by Anita Weiss Foundation is given annually to recognize an individual in teaching/extension and/or regulatory activity in the field of apiculture. The 2018 EAS Morse Award goes to Jon Zawislak, of Arkansas.

Zawislak (pronounced zah-VISH-lock) is the State Extension Apiculturist for the University of Arkansas Division of Agriculture. Jon earned both his undergraduate degree (Botany, 2005) and his Masters degree (Entomology, 2008) from the University of Arkansas. His Masters thesis was recognized for excellence.

He began with the Arkansas Extension program in 2008. He is currently progressing toward his PhD, expected to be completed in 2020. His professional duties are highly varied, and include all aspects of bees, beekeeping and pollinating insects. His hallmark is his ability to form a very strong bond with his clientele over the years. To maintain contact he is website master for his own site Apiculture in Arkansas (uaex.edu/bees), plus the Arkansas Beekeepers Association website (arbeekeepers.org) and for his family’s own bee business Walnut Valley Honey Company (walnutvalleyhoney.com).

Jon is also extremely dedicated to assisting beekeepers in a regulatory capacity even though it is not his primary responsibility. As a long-time member of the state beekeepers organization, he has been a leading member of the apiculture community within the state and region. Richard Underhill, Arkansas EAS Master Beekeeper says Jon can be relied upon and is a strong advocate for bees and beekeepers within Extension in the state and region.

Jon is a talented scientific illustrator. His illustrations can be seen in Honey Bee Biology & Beekeeping, Swarm and Increase Essentials by Larry Connor and the newest Wicwas Press book Beecabulary as well as in Honeybee Veterinary Medicine: Apis Mellifera L. by N. Vidal-Naquet. He is also a talented photographer, and has a Youtube channel called “UAEX Beekeeping.”

Jon was nominated by Dr. Dave Tarpy, one of our EAS double award winners (for his research in 2010 and more recently the Morse award in 2016). He says of Jon: “His service to the beekeeping community is a constant—he is always busy attending field days, lecturing at bee schools, and providing myriad extension services. In this capacity, Jon is a leader among his peers, being active within the EAS and universally respected … every time I see Jon speak, I am always impressed with his clarity, accuracy, and humor, all of which makes him a highly effective extensionist.”

Tom Seeley seconded the Zawislak nomination. He said if he had a “private line” to talk to his deceased mentor, Roger Morse, whom the award is in honor of Tom would tell him that Jon “is sharp as a tack, keeps up with the scientific literature relevant to beekeeping (pesticides, diseases, bee behavior, pollination biology and colony management), and knows how to engage his audience through humor.”

Jon has been active with the EAS Master Beekeeper program testing, as a workshop provider and as a presenter. He was a Keynote speaker in NJ in 2016 and will be so again in 2018 at Virginia. This year his keynote topic will be “Unpopular Science” which will review some of the current research he and others have been conducting on honey bees and agricultural pesticides in the Midsouth.
THE JAMES I. HAMBLETON MEMORIAL AWARD

by Dewey M. Caron

The James I. Hambleton Memorial Award was established by the Eastern Apicultural Society of North America to recognize research excellence in apiculture. Our 2018 award goes to Dr. Olav Rueppell, Professor of Biology at the University of North Carolina at Greensboro, NC.

Dr. Rueppell received his doctorate degree in Germany (his native country) at the University of Wuerzburg. His mentor was the Pulitzer winning ant biologist Dr. Bert Holldobler. For his thesis he clarified the genetic and social structure of queen size in the ant Temnothorax (formerly Leptothorax) rugatulus. Following a short postdoc at the University of Regensburg, Germany, Olav came to the U. S. for postdoctoral research at the University of California, Davis to work in the lab of Dr. Robert Page Jr. (our 1988 Hambleton Award winner). During his three years there he contributed to several projects including: (a) the genetic architecture of the behavioral ontogeny of foraging honey bee workers, (b) the genetic architecture of sucrose responsiveness in the honey bee, and (c) aging and biodemographics of workers and drones.

In 2003 he joined the Biology faculty of the University of North Carolina at Greensboro, N.C. Despite a heavy teaching load, Dr. Rueppell established a new honey bee research program and has been incredibly productive and successful in his research. He has published over 80 peer reviewed publications, an outstanding contribution to honey bee science. One of the central themes that runs through his varied research program is that he has remained at the cutting edge of research technologies, particularly utilizing and capitalizing on the genomic revolution.

Olav has successfully mentored 7 postdoctoral fellows, 15 graduate students and started numerous undergraduate students in scientific research. He has been recognized for excellence in mentoring and has sought to actively provide opportunities for young scientists in the community of social insect research. This has included development and leadership in several National Science Foundation-Research Experiences for Undergraduates (NSF-REU) programs providing critical training in the integration of the fields of biology and mathematics.

In support of his cutting-edge research, Olav has been awarded funding from multiple competitive sources, including NSF, National Institute of Health (NIH), USDA-NIFA (currently a major support of his research effort), USDA-APHIS, Project ApisM, the National Honey Board, and the US Army Research Office. His peer reviewed publications occur in many prestigious journals across several disciplines.

At the most recent American Bee Federation meeting (Reno), Dr. Rueppell and students offered 7 presentations. He was organizer of the North American meeting of the International Union for the Study of Social Insects in 2012. Currently, he is an Associate Editor of the Journal of Behavioral Ecology and Sociobiology, on the Scientific Board of Apidologie, and member of the Editorial Board of PLoS ONE. He is an event organizer for the Science Olympiad in Entomology for North Carolina.

Olav and his students have been investigating a multitude of concerns in apiculture. He has recently focused on the importance of pests and pathogens. For example, he travelled to Thailand to study varroa in their native habitat on their original host, Apis ceranae. He has numerous students investigate honey bee viruses, particularly IAPV, and behavior and life history of honey bees from theoretical and empirical perspectives. He is also interested in abiotic stress, for example the sublethal effects of pesticides on intestinal stem cells and the leaching of heavy metals into wax comb from embedded support wires in wax foundation.
THE JAMES I. HAMBLETON MEMORIAL AWARD (CONTINUED...)

Olav was nominated for the EAS Hambleton award by David Tarpy of NC State University, a fellow co-founder of the Southern Appalachian Honeybee Research Consortium. For the past 4 years, Olav has been participating in a collaboration elucidating the genetic architecture of oxidative stress and aging of honey bees with Dr David Tarpy, our 2010 Hambleton award winner. One specific topic has been to understand the genetic means whereby some individual bees resist oxidative stress and aging and consequently have increased longevity compared with other colony members. Dave says of this collaborative effort: “If we can find molecular markers that are associated with bees living longer, it could have profound implications for the honey bee..... Clearly, this would have a long-term, sustainable impact for beekeepers.”

Supporting his nomination was Dr Christina Grozinger of Penn State, our 2013 Hambleton Winner. She wrote: “Olav is an outstanding scientist, a dedicated mentor, and an excellent collaborator and colleague. His research program is impressively integrative and trans-disciplinary, and he has fluidly synthesized both basic and applied research to make numerous important contributions to our understanding of honey bee biology, behavior and health.” One research effort she highlighted was “Olav's landmark 2010 paper demonstrating that sick honey bees are more likely to remove themselves from the colony and die”.

Dr Rueppell will present a keynote talk on Friday morning, entitled “Transmission Dynamics of Honey Bee Viruses and the Role of the Queen”.

CHARLES AND EVELYN DIVELBISS EDUCATION AWARD

At each annual conference, the Eastern Apicultural Society presents the Charles and Evelyn Divelbiss Education Award. This award is presented to a person or couple who has - over a period of years - reached out to the non-beekeeping public to explain the value of honey bees in our lives. Nominees reach out to the general public by speaking for groups, such as 4-H clubs, Scouting organizations, school groups, community organizations, Lions Clubs, and garden clubs. They may have given media interviews and participated in exhibits at county and state fairs to reach the non-beekeeping public. They may also teach Short Courses and other instructional work to help educate beekeepers and prospective beekeepers. In keeping with tradition, the winner is not made public until the banquet ending the conference. At this time the winner will be announced, and the award presented.
**EAS RESEARCH AWARDS**

Kelly Kulhanek is a Ph.D. student in Dr. Dennis vanEngelsdorp's Bee Lab at the University of Maryland, College Park. She has a B.S. in Molecular Environmental Biology from UC Berkeley where she worked with native bees as a research assistant in Claire Kremen's lab. She then spent a field season with the United States Geological Society in North Dakota studying honey bee health and landscape change and became completely hooked on honey bees. Today she studies best beekeeping management practices and landscape level effects on colony health, including transmission of Varroa between apiaries.

With the generous funds provided by the EAS Foundation for Honey Bee Research, she will conduct and experiment to test the modes and extent of inter-apiary Varroa transmission. The objectives of this project are:

1. To demonstrate, describe and quantify the degree of bee and mite spread across the landscape caused when colonies crash due to high Varroa.

2. To identify risk factors that may impact the propensity for bees and mites to spread across the landscape. Specifically, we will investigate the role Varroa-vectored viruses, primarily Deformed Wing Virus, may play in the movement of bees from crashing colonies.

To address these objectives, three test apiaries will be established with one low-Varroa control colony and one high-Varroa “donor” colony. The test apiaries are surrounded by other apiaries of varying size and distance, ranging from 0.5-3 miles from a test apiary. Each of the 6 test colonies' bees will be painted a unique color to represent their colony of origin. As the high-Varroa colonies crash, all apiaries in the area will be monitored for painted bees. If the hypothesis that bees from colonies crashing due to Varroa infestation spread to surrounding apiaries is correct, more painted bees from high-Varroa donor colonies are expected to be found than from low-Varroa control colonies. Painted bees found outside their colony of origin will be analyzed for viruses and compared to bees who remained in their colony of origin to test whether levels of Varroa-vectored viruses such ad DWV could be elevated in drifting bees. This study should provide much-needed insight into the details of what happens to colonies when they crash from high Varroa infestation, and the effects these crashes have on neighboring colonies and apiaries.
Occurrence of honey bee (Apis mellifera L.) pathogens in commercial and traditional hives with analysis of oxidative stress parameters

Authors: E. Tarica, J. Stevanovica, A. Stanojkovicb, N. Aleksicc, U. Glavinica, B. Zikica, Z. Stanimirović

Beekeeping practice typical of commercial apiculture hugely influences the honeybee's vitality and health. In commercial apiaries it prevents natural selection which improves the innate bee resistance. In this research it is planned to investigate whether there are differences in the occurrence of important brood and adult bee pathogens between hives kept in commercial and traditional way. In addition to this, in adult bees the parameters of oxidative stress will be assessed: the activities of superoxide dismutase (SOD), catalase (CAT) and glutathione S-transferase (GST), and the levels of malondialdehyde (MDA). Data obtained from such research are yet to be known. The research will be conducted on bees kept in 120 commercial bee hives of Dadant-Blatt (DB) type and 24 traditional primitive, so-called trmka hives on the Pešter Plateau. Brood samples from all hives will be analysed for bee brood disease pathogens (Paenibacillus larvae, Melissococcus plutonius, Ascosphaera apis and sacbrood virus – SBV). In adult bee samples the occurrence of their pathogens will be detected (deformed wing virus – DWV, chronic bee paralysis virus - CBPV, acute bee paralysis virus– ABPV and Nosema sp.) as well as Lotmaria passim and Crithidia mellifica.

Key words: honey bee, bee pathogens, oxidative stress, commercial beekeeping, traditional beekeeping
Imagine a honey bee colony with more than one queen. Not just the familiar mother-daughter situation seen from time to time after supercedure, but a condition in which multiple queens live together in one colony, harmoniously and productively. James Withrow, the 2018 EAS Student Award winner, has been experimenting with this scenario as part of his doctoral dissertation at North Carolina State University (NCSU) in Raleigh, NC. His studies could have significant implications for how honey bees are managed.

Withrow found that package queens are usually accepted at high rates once installed at their destination hives. For two years, he studied queen quality during production and delivery. His research ruled out quality problems at the breeder end by determining that breeders typically produce high quality queens. He also found no negative affect on performance when queens were exposed to a range of temperatures during transport.

During the colony build up phase within 6-8 weeks after installation, however, Withrow found that the number of queen problems, such as supersedure, escalates. This finding, from studies conducted with advisor Dr. Dave Tarpy and collaborator Dr. Jeff Pettis, has led Withrow to continuing research on the problem of queen quality and queen interactions within colonies. His goal is to better understand how honey bees can be managed to achieve “healthier, more productive colonies, with fewer queen problems.”

Withrow also has looked at emergency queen selection. When a colony rears emergency queens, do nurse bees select certain larvae over others? His initial studies say yes and support the “rare ‘royal’ patriline” theory in which specific subfamilies within the colony are selected to become queens. His sampling of emergency queens yielded evidence of more subfamilies in the colony than expected, and by extension more drones involved in mating than previously thought.

Beekeepers who experience queen problems and associated decreases in productivity or colony loss now regularly use the time-consuming and costly approach of preemptively replacing queens. Withrow is exploring the potential for increased productivity by running multiqueen colonies. These colonies include multiple “cull-queens.” If one queen prematurely fails, the others continue performing to maintain the colony. He has been successful in establishing stable, functioning polygynous colonies with ten or more queens and plans to continue investigating the practical consequences of these unique colonies.

James’ nomination was supported by Dr. Dave Tarpy, NCSU and Dr. Olav Ruepell, UNC, Greensboro. He comes from an undergraduate background in liberal arts and developed his interest in the natural sciences after taking graduate level courses in evolutionary ecology at NCSU. He joined Dr. Tarpy’s lab in 2014.

His dissertation work, as explained by Dr. Ruepell “...combines scientifically fundamental and important questions with a problem of practical relevance that could directly improve apicultural practices in innovative ways.” His advisor, Dr. Tarpy, described James as “keenly interested in the interface between evolution, ecology, behavior, and genetics” and made note of his “maturity, sense of presence, and infectious enthusiasm.” Dr. Tarpy went on to emphasize the importance of James’ work by saying it “may be among the most impactful projects in apiculture science in the last decade or more.”

James Withrow will be speaking at the 2018 EAS conference from 4:15-5:15pm on Friday in Conference Room D. Be sure to get a seat to hear all about his fascinating research.
Welcome to EAS 2018 for the Short Course and Conference. The program is packed full of interesting and diverse topics and speakers, including many wonderful women, beekeepers who manage colonies South of the Mason-Dixon line, international beekeepers, leading scientists and researchers, queen breeders and more. EAS is commonly referred to as “Bee Camp” and like summer camp offers a relaxed opportunity to meet wonderful and dynamic people. I encourage you to consider sharing a meal with someone new and expand your world, as well as your knowledge of the honey bee, managing colonies, honey and hive products and more! Several book authors will be present and signing books at lunch time in the vendor hall. We have a great apiary site with lots of workshops scheduled this year so be sure to visit. The honey show is, of course, the place to be. The vendor hall, in one of the best locations in recent memory, offers the latest and greatest gadgetry as well as plenty of the foundational supplies you need and several new vendors will be at EAS this year. You can watch a photo slide show celebrating thirty years of EAS and even start your morning with yoga for beekeepers at 6:00am.

I have been humbled to serve as Program Chair. I am grateful for everyone who makes EAS possible. I would like to call out special thanks to a few folks including EAS 2018 President Pam Fisher and our planning team, Dr. Rick Fell and Dr. Jennifer Tsuruda who helped me with many program details, EAS sponsors and vendors who help make a program of this caliber financially possible, and of course the dozens of EAS volunteers and State Directors who give so much of their time. Heartfelt appreciation to my dear friends and mentors Mike and Bob whose support is unwavering. Finally, a special thank you to my husband and alter ego, George H. Wilson III, EAS Honey Show Chair this year, for putting up with me missing in action for the better part of a year to make these five days of programming possible.
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MEALS

Breakfast is on your own at your choice of lodging. We are offering boxed lunches for $15 each at the convention center. All boxed lunches include a sandwich, choice of beverage, Granny Smith apple, potato chips and a freshly baked cookie. Both vegetarian and gluten-free options are available daily to accommodate special dietary restrictions. If you did not order your boxed lunch when you registered, we will have a very limited number of extra lunches available for purchase. Check the registration desk for availability.

Dinner is also on your own Monday through Wednesday which is a great opportunity to explore the many restaurants in Hampton. Dining options in Hampton are extensive and varied with a restaurant to fit every budget. If you are staying at the Embassy Suites, avail yourself of their shuttle which is a free transportation service within a 5-mile radius of the hotel. The City of Hampton also offers the Scuttle Bus to transport visitors from their accommodations to dining, shopping and entertainment; go to VisitHampton.com for routes and hours of operation.

Our Thursday dinner is $40 per person by ticket. The plated dinner features your choice of Grilled Chicken Rossini paired with Exotic Mushroom Madeira (Gluten Free) or Farfalle Pasta with Saffron Cream and Roasted Vegetables (Vegetarian). All plated dinners include: Embassy Salad with Citrus Vinaigrette or Buttermilk Ranch, Chef's Selection of Starch and Seasonal Vegetable, Rolls with Butter, Iced Tea, Iced Water, and Coffee plus a dessert of either Strawberry Extravaganza which is layers of Strawberry Marbled White Cake with Strawberries and Whipped Cream or a Gluten Free Fruit Cup. A cash bar is open the entire evening. If you did not purchase the Thursday Dinner when you registered, will have a few extra dinner tickets available for purchase on a first come basis. Check the registration desk for availability.

Our Friday dinner is $50 per person by ticket and features Virginia regional ingredients.

Choose from Broiled Mahi Stuffed with Blue Crab in a Saffron Cream; Pan Seared Breast of Chicken with Virginia Ham Garnish and Smoked Gouda Mornay Sauce; Wild Mushroom Papperdelle featuring Green Peas, Eggplant and American Grana (Vegetarian); or Pan Seared Breast of Chicken with Virginia Ham Garnish without Smoked Gouda Mornay Sauce (Gluten Free). Dessert is a choice of Baklava with Seasonal Berries and Whipped Cream or a Gluten Free Brownie. All plated dinners include Embassy Salad with Citrus Vinaigrette or Buttermilk Ranch, Chef's Selection of Starch and Seasonal Vegetable, Rolls with Butter, Iced Tea, Iced Water, and Coffee. A cash bar will be open the entire evening. Tickets for the Friday dinner were available through preregistration. A few tickets may be purchased onsite; check with the registration desk for availability.
VENDORS

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Api-Quip Canada
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Beaver Plastics
bpgrower.com/langstroth-honeybee-brood-box/

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Bee Culture Magazine
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Betterbee
betterbee.com/

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Eco Bee Box
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beetlejail.com

NOD Apiary Products Ltd.
nodglobal.com

OxaVap LLC
oxavap.com

Pierco Inc.
pierco.com

Pollinator Stewardship Council
pollinatorstewardship.org

Riverwood Inc
riverwood.com.pk/bees

Rossman Apiaries, LLC
gabees.com

Shamrock Queen Cage, LLC
queencage.com

Silveus Insurance Group
silveuscropins.com

The Nat Hive
twoqueenhive.com

Veto-Pharma
veto-pharma.com
### Short Course Schedule: Virginia - Where it all Began

**MONDAY, AUGUST 13**

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<tr>
<th>6:00–7:00</th>
<th>Yoga for Beekeepers (<em>Pam Lavelle</em>) in front of business center 1st floor convention center (bring a mat if you have one)</th>
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<tr>
<td>7:30–4:00</td>
<td><strong>Registration</strong> <em>(Main Lobby Convention Center 1st floor)</em></td>
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<td>Electronic Colony Monitoring</td>
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<td>(Frank Linton)</td>
<td><em>(Jennifer Tsuruda)</em></td>
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<td>Colony Monitoring: An Overview</td>
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<td>Hive monitoring for Hobbyists</td>
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<td>Rafael Cabrera</td>
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<td>9:35–10:30</td>
<td><strong>Demonstrations &amp; Poster Sessions</strong></td>
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<td>Citizen Science with Homemade Solar Hive Scales</td>
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<td>Andrew Wootton</td>
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<td>Bee Biology Basics</td>
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<td>Bill Hesbach</td>
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<td>Protecting bees from Pesticides: Beekeeper Interventions</td>
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<td>James Wilson</td>
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<td>Setting Up a Successful Serious Sideline Honey &amp; Honey Product Business</td>
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<td></td>
<td>SET UP</td>
</tr>
<tr>
<td>10:30–11:00</td>
<td><strong>Hive Tracks: A Matter of Record</strong></td>
</tr>
<tr>
<td></td>
<td>James Wilkes</td>
</tr>
<tr>
<td></td>
<td>Electronic Hive Monitoring: Sensor Synergy</td>
</tr>
<tr>
<td></td>
<td>Huw Evans</td>
</tr>
<tr>
<td></td>
<td>What do you see? Reading Frames</td>
</tr>
<tr>
<td></td>
<td>Landi Simone</td>
</tr>
<tr>
<td></td>
<td>State Pollinator Protection Plans: What Beekeepers Need to Know</td>
</tr>
<tr>
<td></td>
<td>Michelle Colopy</td>
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<tr>
<td></td>
<td>Advancing Technology for Integrated Precision Apiculture: Tools to Manage Honey Bee Health &amp; Performance</td>
</tr>
<tr>
<td></td>
<td>Dick Rogers</td>
</tr>
<tr>
<td></td>
<td>Lowering stress working the colony</td>
</tr>
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<td></td>
<td>Billy Davis &amp; Sustainable Honey Bee Program</td>
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<td></td>
<td>Finding Queens Friends &amp; Co.</td>
</tr>
<tr>
<td>11:00–12:00</td>
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</tbody>
</table>

*Schedule may be subject to minor changes.*
# Short Course Schedule: Virginia - Where it all Began

**MONDAY, AUGUST 13 (CONTINUED...)**

Schedule may be subject to minor changes.

<table>
<thead>
<tr>
<th>Location</th>
<th>Conf. Room AB</th>
<th>106-107</th>
<th>108-109</th>
<th>102-103</th>
<th>APIARY</th>
<th>Conf. Rm. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td><strong>Electronic Colony Monitoring</strong> (Frank Linton)</td>
<td><strong>BEGINNER</strong> (Jennifer Tsuruda)</td>
<td><strong>INTERMEDIATE</strong> Protecting Bees &amp; Honey (Keith Tignor)</td>
<td><strong>ADVANCED</strong> BEEs as BUSINESS (Freddy Proni)</td>
<td><strong>APIARY</strong></td>
<td><strong>Master Beekeeper</strong></td>
</tr>
<tr>
<td></td>
<td>Internet of Bees: Bee Counting (IOBee) Huw Evans</td>
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<td></td>
<td></td>
<td></td>
<td>10 min transfer time</td>
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<tr>
<td></td>
<td>10 min transfer time</td>
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</tr>
<tr>
<td></td>
<td>Spatial &amp; Temporal Variations of Hive Temperature Jeffrey Groff</td>
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</tr>
<tr>
<td>3:30-4:00</td>
<td>30-minute Break (Upper lobby convention center 2nd floor)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4:00-5:00</td>
<td>The Genius Hive Joseph Cazier</td>
<td>Mites, Monitoring, and Miticides Lewis Cauble</td>
<td>Field Watch: Improving Stewardship &amp; Communication Through the Use of Mapping Systems Bob Walters</td>
<td>Open Forum Bees as Business Q&amp;A Fred Proni, Kim Flottum &amp; friends</td>
<td>Smoker Lighting Tips &amp; Tricks Jim Fraser</td>
<td>MB Candidate Q &amp; A Session</td>
</tr>
<tr>
<td></td>
<td>Continuous Beehive Weight &amp; Temp. Data: Long term &amp; Same Day Changes William Meikle</td>
<td></td>
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</tr>
<tr>
<td>6:30</td>
<td>St. George’s Brewing Company Tour 204 Challenger Way, Hampton, VA Tours start at 6:30 (Open to All)</td>
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<tr>
<td>7:00-9:00</td>
<td>MB Study Groups</td>
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</table>
### Short Course Schedule: Virginia - Where it all Began

**TUESDAY, AUGUST 14**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00-7:00</td>
<td>Yoga for Beekeepers (Pam Lavelle) in front of business center 1st floor convention center (bring your own mat if you have one)</td>
</tr>
<tr>
<td>7:30-4:00</td>
<td>Registration (Main Lobby Convention Center 1st floor)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Room</th>
<th>Conf. Room AB</th>
<th>106-107</th>
<th>108-109</th>
<th>102-103</th>
<th>APIARY</th>
<th>211</th>
<th>201-202</th>
<th>Ballroom EFG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td>Queen Rearing (Dan Conlon &amp; RHBA Russian Honey Bee Breeding Assn)</td>
<td>BEGINNER (Jennifer Tsuruda)</td>
<td>Intermediate Colony Structure &amp; Hive Styles (Keith Tignor)</td>
<td>Excellence in Honey &amp; Hive Products (Karla Eisen, George Wilson)</td>
<td>Apiary</td>
<td>Master Beekeeper</td>
<td>Honey Show</td>
<td>VENDORS</td>
</tr>
<tr>
<td>8:30-9:25</td>
<td>Topics: <em>History &amp; Structure of RHBA Breeding Program</em> <em>Queen Rearing Process</em> <em>Mating Queens, Yards &amp; Drone Diversity</em> <em>Selecting Breeder Stock</em> <em>Russian Bee Management</em> <em>Russian Bee Myths, Comparisons to Italians, Hybrids</em> <em>Using Russian Bees in Commercial Operations</em></td>
<td>Seasonal Management of the Colony Bill Hesbach</td>
<td>Nest Structure Keith Tignor</td>
<td>Pursuing Excellence in the Craft: Why We Do It George Wilson &amp; Mike Palmer</td>
<td>Who’s Zooming Where? Morning Observations in the Apiary Erin Forbes</td>
<td>MB Written Test (until 12:30) Room 208</td>
<td>MB Oral Tests Rooms 209, 210</td>
<td>CLOSED</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>30 Minute Break (Ballroom EFG)</td>
<td>VENDORS OPEN</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11:00-12:00</td>
<td>Queen Rearing &amp; Russian Breeding cont. RHBA members</td>
<td>Managing for Honey Production Jim Fraser</td>
<td>Langstroth &amp; Long Box Hives James Wilson, Keith Tignor</td>
<td>Comb Honey Production Mike Palmer</td>
<td>Managing Small Hive Beetle Jen Keller</td>
<td>VENDORS OPEN</td>
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</tr>
</tbody>
</table>
## Short Course Schedule: Virginia - Where it all Began

**TUESDAY, AUGUST 14 (CONTINUED...)**

<table>
<thead>
<tr>
<th>Room</th>
<th>Conf. Room AB</th>
<th>106-107</th>
<th>108-109</th>
<th>102-103</th>
<th>APIARY</th>
<th>211</th>
<th>201-202</th>
<th>Ballroom EFG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
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</tr>
<tr>
<td>Theme</td>
<td>Queen Rearing (Dan Conlon &amp; Russian Honey Bee Breeding Association)</td>
<td>BEGINNER (Jennifer Tsuruda)</td>
<td>Intermediate Colony Structure &amp; Hive Styles (Keith Tignor)</td>
<td>Excellence in Honey &amp; Hive Products (Karla Eisen, George Wilson)</td>
<td>Apiary</td>
<td>Master Beekeeper</td>
<td>Honey Show</td>
<td>VENDORS</td>
</tr>
<tr>
<td>1:30-2:25</td>
<td>Queen Rearing &amp; Russian Breeding cont. RHBA members</td>
<td>Tips, Common Mistakes &amp; Other Wisdom Cindy Bee</td>
<td>Observation Hives Frank Linton</td>
<td>Candles &amp; Wax Tips &amp; Tricks Bob Wellemeier</td>
<td>CLOSED Queen Rearing track attendance only</td>
<td>MB Oral Tests Rooms 208, 209, 210</td>
<td>Closed</td>
<td>OPEN</td>
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<tr>
<td>2:35-3:30</td>
<td>Queen Rearing &amp; Russian Breeding cont. RHBA members</td>
<td>Nucs and Splits Erin Forbes</td>
<td>Warre Hives Tucka Saville</td>
<td>Judging Mead George H. Wilson &amp; Michael Young</td>
<td>Top Bar Hives Wyatt Mangum</td>
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<tr>
<td>3:30-4:00</td>
<td>30 Minute Break (Ballroom EFG)</td>
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<td></td>
<td>EVALUATIONS</td>
<td></td>
</tr>
<tr>
<td>4:00-5:00</td>
<td>Queen Rearing &amp; Russian Breeding cont. RHBA members</td>
<td>Hands On Mentoring Buddy May</td>
<td>Improved Success Overwintering with Reduced Nest Cavity Doug Vinson</td>
<td>Open Forum Q &amp; A Michael Young, Mike Palmer, Bob Wellemeier. Karla Eisen moderator</td>
<td>Warre &amp; Other Hive Configurations Tucka Saville</td>
<td>Drop Off Honey Show Entries</td>
<td></td>
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<tr>
<td>6:30- Boat Boards</td>
<td>Miss. Hampton II Sunset Cruise 710 Settlers Landing Rd. Hampton, VA 7-9 pm (Tickets required)</td>
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</tbody>
</table>

*Schedule may be subject to minor changes.*
# Conference Schedule: Virginia - Where it all Began

## WEDNESDAY, AUGUST 15

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
<th>Master Beekeeper</th>
<th>Honey Show</th>
<th>Children's Program</th>
<th>Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00-7:00</td>
<td>Yoga for Beekeepers (Pam Lavelle) in front of business center 1st floor convention center (bring your own mat if you can)</td>
<td>Ballroom ABC - 2nd floor</td>
<td></td>
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<tr>
<td>7:30-4:00</td>
<td>Registration (Main lobby convention center- 1st floor)</td>
<td>Ballroom ABC - 2nd floor</td>
<td>Conf. D</td>
<td>201-202</td>
<td>102-103</td>
<td>Ballroom EFG</td>
</tr>
<tr>
<td>8:15-8:45</td>
<td>Opening Ceremony Chief Lee Lockamy, Nansemond Indian Tribe Welcome to EAS Pam Fisher, EAS President</td>
<td>Ballroom EFG</td>
<td>Lab Test 8:30-12:30</td>
<td>Drop Off Honey Show Entries</td>
<td>Children’s Activity group at 10:00-11:30 (2nd group will at 12 if needed)</td>
<td>Vendors OPEN</td>
</tr>
<tr>
<td>8:45-9:45</td>
<td>Randy Oliver Adapting to Varroa &amp; Extended-Release Oxalic Acid Research Update</td>
<td>Ballroom EFG</td>
<td>Field Exams Start (Apiary)</td>
<td>Closed for judging</td>
<td>Thea Klein-Mayer</td>
<td></td>
</tr>
<tr>
<td>9:45-10:45</td>
<td>Celia Davis The Sex Life of Plants</td>
<td>Ballroom ABC - 2nd floor</td>
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<tr>
<td>10:45-11:15</td>
<td>30 Minute Break (Ballroom EFG)</td>
<td>Ballroom ABC - 2nd floor</td>
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</tr>
<tr>
<td>12:15-1:30</td>
<td>LUNCH (ticket required) Upstairs Lobby Convention Center 2nd floor (Ballroom ABC available for seating)</td>
<td>Ballroom ABC - 2nd floor</td>
<td></td>
<td></td>
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<tr>
<td>1:30-2:30</td>
<td>Pesticide and Neonic Facts Randy Oliver</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>How We Do It: A Sideline Queen Rearing Business Chris Hewitt &amp; Lynn Hewitt White</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Simple Smart Beekeeping Kirsten Traynor</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Telling Your Story Cindy Bee</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Selecting for Behavioral Resistance to Varroa D. Krispn Given</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Bee Biology Jamie Ellis Closed for judging</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>NC Grown: Uncapping the Nation’s Largest Beekeeping Organization Freddy Proni</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Hygienic and Grooming Behavior in Russian Honey Bees Lilia De Guzman</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Bee Biology continued Jamie Ellis</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Nutrition Basics Jennifer Tsuruda</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Locally Bred Queens Survive Better Than Imports Andrew Gibb</td>
<td>Ballroom EFG</td>
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<tr>
<td>1:30-2:30</td>
<td>Mr. Bee Celia Davis</td>
<td>Ballroom EFG</td>
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<tr>
<td>2:30-2:45</td>
<td>15 Minute Break (Ballroom EFG)</td>
<td>Ballroom EFG</td>
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<tr>
<td>4:00-8:00</td>
<td>BBQ BEACH BASH Paradise Ocean Club 490 Fenwick Rd. Fort Monroe, VA (Facilities open at 11:00 AM to ticket holders) (Advance Tickets Required)</td>
<td>Ballroom ABC</td>
<td></td>
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<tr>
<td>7:30-9:00</td>
<td>Queen of the Sun Movie (free &amp; open to the public) Ballroom ABC</td>
<td>Ballroom ABC</td>
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</tbody>
</table>
# Conference Schedule: Virginia - Where it all Began

**THURSDAY, AUGUST 16**

## 6:00 - 7:00 PM
Yoga for Beekeepers *(Pam Lavelle)* in front of business center 1st floor convention center (bring your own mat if you can)

## 7:30 - 4:00 PM
Registration (Main lobby convention center- 1st floor)

## 8:00 - 4:45 PM
Jamestown Field Trip

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Activity/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballroom ABC - second floor</td>
<td>6:00 - 7:00</td>
<td>Yoga for Beekeepers</td>
</tr>
<tr>
<td>7:30 - 4:00</td>
<td>Registration (Main lobby convention center- 1st floor)</td>
<td></td>
</tr>
<tr>
<td>8:00 - 4:45</td>
<td>Jamestown Field Trip</td>
<td></td>
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</tbody>
</table>

## 8:15 - 8:30 PM
Introductions to the AM session and day

## 8:30 - 9:30 PM
*Jamie Ellis* "What Is Killing Our Bees (and What Can We Do About It)?"

## 9:30 - 10:30 PM
*Juliana Rangel* "Behavioral Ecology of Swarming"

## 10:30 - 11:00 PM
30 Minute Break (Ballroom EFG)

## 11:00 - 12:00 PM
*Jon Zawislak* *(Morse Award Winner)* "Un-popular Science"

## 12:00 - 1:30 PM
LUNCH (ticket required) Upstairs Lobby Convention Center 2nd floor *(Ballroom ABC available for seating)*

## 1:00 - 2:30 PM

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conf. AB (1st Floor) (150)</td>
<td>106-107</td>
<td>Tips for Handling Bees&lt;br&gt;Randy Oliver</td>
</tr>
<tr>
<td>108-109</td>
<td>Honey Bees as Superorganism: The Hive or the Honey Bee&lt;br&gt;Jamie Ellis</td>
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<tr>
<td>104-105</td>
<td>Insect Photography&lt;br&gt;Jennifer Tsuruda</td>
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<tr>
<td>Conf D</td>
<td>203-204</td>
<td>Taxonomy of Apidae&lt;br&gt;Juliana Rangel</td>
</tr>
<tr>
<td>APIARY</td>
<td>Finding Queens&lt;br&gt;Friends &amp; Co.</td>
<td></td>
</tr>
<tr>
<td>Honey Show</td>
<td>201-202</td>
<td>Long Box Beekeeping&lt;br&gt;Albert Chubak</td>
</tr>
<tr>
<td>Vendors</td>
<td>OPEN</td>
<td>OPEN</td>
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</table>

## 1:30 - 2:30 PM

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>1:30-2:30</td>
<td>Tips for Handling Bees&lt;br&gt;Randy Oliver</td>
<td></td>
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<tr>
<td>106-107</td>
<td>Honey Bees as Superorganism: The Hive or the Honey Bee&lt;br&gt;Jamie Ellis</td>
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</tr>
<tr>
<td>108-109</td>
<td>Insect Photography&lt;br&gt;Jennifer Tsuruda</td>
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<tr>
<td>104-105</td>
<td>Tropilaelaps Mites: A Fate Worse Than Varroa D. Sam Ramsey</td>
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<tr>
<td>Conf D</td>
<td>203-204</td>
<td>Taxonomy of Apidae&lt;br&gt;Juliana Rangel</td>
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<tr>
<td>APIARY</td>
<td>Finding Queens&lt;br&gt;Friends &amp; Co.</td>
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<tr>
<td>Honey Show</td>
<td>201-202</td>
<td>Long Box Beekeeping&lt;br&gt;Albert Chubak</td>
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<tr>
<td>Vendors</td>
<td>OPEN</td>
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</table>

## 2:00 - 2:30 PM
LUNCH (ticket required) Upstairs Lobby Convention Center 2nd floor *(Ballroom ABC available for seating)*

## 2:30 - 3:45 PM

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>Ballroom ABC - second floor</td>
<td>2:30-2:45</td>
<td>15 Minute Break</td>
</tr>
<tr>
<td>2:45-3:45</td>
<td>Community Sourcing of Bees: Here’s How We Did It&lt;br&gt;Bonnie Morse</td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Community Engagement for Sustainable Beekeeping&lt;br&gt;Pam Fisher</td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Ten Years of White House Bees&lt;br&gt;Charlie Brandts</td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Growing Degree Days&lt;br&gt;Keith Tignor</td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Strengthening Your Bee Club&lt;br&gt;Michele Colopy</td>
<td></td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Judging a Honey Show&lt;br&gt;Michael Young MBE</td>
<td></td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Hygienic Behavior Testing Part 1&lt;br&gt;Don Hopkins</td>
<td></td>
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<tr>
<td>1:00 - 2:30 PM</td>
<td>Sugar Shake Testing for varroa&lt;br&gt;Lewis Cauble</td>
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</table>

## 3:45 - 4:15 PM

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Ballroom ABC - second floor</td>
<td>3:45-4:15</td>
<td>30 Minute Break</td>
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<tr>
<td>4:00-5:00</td>
<td>Tea with Celia&lt;br&gt;Celia Davis <em>(Embassy Suites Hotel Mercury Ballroom- Advance Ticket Required)</em></td>
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<tr>
<td>4:15-5:15</td>
<td>Seasonal Management at French Hill Apiaries&lt;br&gt;Mike Palmer</td>
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<td>4:15-5:15</td>
<td>Sideline Pollination&lt;br&gt;Bob Wellemeyer</td>
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<tr>
<td>4:15-5:15</td>
<td>Hot Bees?&lt;br&gt;Thermal Cameras Reveal Bee Behavior in New Ways&lt;br&gt;Wyatt Mangum</td>
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<tr>
<td>4:15-5:15</td>
<td>Teaching Bees to Children&lt;br&gt;Toni Burnham</td>
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<td>4:15-5:15</td>
<td>Age Polytheism&lt;br&gt;Juliana Rangel</td>
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<td>4:15-5:15</td>
<td>Where Beekeeping Began - and Continues!&lt;br&gt;Dewey Caron</td>
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<td>4:15-5:15</td>
<td>Managing Small Hive Beetle&lt;br&gt;Jen Keller</td>
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## 5:00 - 6:00 PM
SILENT AUCTION (Upper Lobby Convention Center- 2nd floor)

## 6:00 - 9:00 PM
Social with Cash Bar (Upper Lobby Convention Center- 2nd floor)

## 6:30 - 8:00 PM
Dinner and Honey Show Awards (Ballroom BC) *(advance tickets required)*

## 8:00 - 9:30 PM
LIVE AUCTION (Ballroom BC) *(Auction is Open to ALL)*
### Conference Schedule: Virginia - Where it all Began

**FRIDAY, AUGUST 17**

<table>
<thead>
<tr>
<th>Location</th>
<th>Master Beekeeper</th>
<th>Honey Show</th>
<th>Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballroom ABC (2nd floor)</td>
<td>MB Annual Mtg. Conf. D 7:30-8:30</td>
<td>201-202</td>
<td>Ballroom EFG</td>
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<tr>
<td>7:30-12:00</td>
<td>Registration (Main lobby convention center 1st floor)</td>
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<tr>
<td>8:15-8:30</td>
<td>Introductions to the AM session and day</td>
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<tr>
<td>8:30-9:30</td>
<td><strong>Michael Young</strong> <em>Honey Bees From the UK to the USA</em></td>
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<tr>
<td>9:30-10:30</td>
<td><strong>Dr. Olav Rueppell (Hambleton Award Winner)</strong> <em>Transmission Dynamics of Honey Bee Viruses and the Queen</em></td>
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<tr>
<td>10:30-11:00</td>
<td>30 Minute Break (Ballroom EFG)</td>
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<tr>
<td>11:00-11:15</td>
<td><strong>Welcome to EAS 2019</strong> <strong>Buddy May</strong></td>
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<tr>
<td>11:15-12:00</td>
<td>EAS Membership Meeting</td>
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<tr>
<td>12:00-1:30</td>
<td><strong>LUNCH (ticket required) Upstairs Lobby Convention Center 2nd floor</strong> <em>(Ballroom ABC available for seating)</em></td>
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<td><strong>12:30: 30 Years of EAS Photo Slide Show</strong> <em>Betty Mencucci</em> (Ballroom ABC)</td>
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<tr>
<td>12:30 -4:00</td>
<td><strong>PICK UP HONEY EXCHANGE</strong> (Ballroom EFG)</td>
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*Schedule may be subject to minor changes.*
# Conference Schedule: Virginia - Where it all Began

**FRIDAY, AUGUST 17 (CONTINUED...)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Conf. AB (1st floor)</th>
<th>106-107</th>
<th>108-109</th>
<th>104-105</th>
<th>Conf D</th>
<th>203-204</th>
<th>Apiary</th>
<th>Honey Show</th>
<th>Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30-2:30</td>
<td>Queen and Drone Reproductive Biology Krispn Given</td>
<td>Pheromones - the Silent Messengers Celia Davis</td>
<td>Foraging Environment and Honey Bee Health Carlyle Brewster</td>
<td>Meliponas: A Tool for Conservation &amp; Entrepreneurship in Tropical Rural Communities Germán Perilla</td>
<td>Marketing the Business of Bees Kim Flottum</td>
<td>Understanding &amp; Monitoring for Varroa Jennifer Tsuruda</td>
<td>Hygienic Test Part 2 Don Hopkins</td>
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<td>2:30-2:45</td>
<td>15 minute Break (Ballroom EFG)</td>
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<tr>
<td>4:15-5:15</td>
<td>Queen Rearing Mike Palmer</td>
<td>Easy Queen Introduction Kirsten Traynor</td>
<td>Dancing honey bee bioindicators communicate habitats’ ability to feed pollinators Maggie Couvillon</td>
<td>Managing bee club growth &amp; teaching w/the Flow Hive “Down Under” Andrew Wootton</td>
<td>Sharing the Throne: Multi Queen Colonies James Withrow (EAS Student Award)</td>
<td>Reading Combs: Understanding Bee Biology Over a Season Randy Oliver</td>
<td>Closed</td>
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<tr>
<td>5:00-9:00</td>
<td>Social with Cash Bar (Upper Lobby Convention Center 2nd floor)</td>
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<tr>
<td>6:30-9:00</td>
<td>Banquet Dinner, Entertainment by Sam Ramsey, Awards &amp; More (Ballroom BC) (advance ticket required)</td>
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Talk descriptions and room assignments by speaker as of 06/18/2018. Subject to changes.

CINDY BEE

• Understanding Swarming - Tue Aug 14th 9:35-10:30am - Room 106-107
• Tips, Common Mistakes & Other Wisdom - Tue Aug 14th 1:30-2:25pm - Room 106-107
• Telling Your Story - Wed Aug 15th 1:30-2:30pm - Room 104-105

Writing and story telling

BOB BRACHMAN

• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB

CHARLIE BRANDTS

• Ten Years of White House Bees - Thu Aug 16th 2:45-3:45pm - Room 108-109
Like the title says, this talk will go over ten years of managing the White House honey bee colony, unique set up, management and setting, etc.

DR. CARLYLE BREWSTER

• Foraging Environment and Honey Bee Health - Fri Aug 17th 1:30-2:30pm - Room 108-109

TONI BURNHAM

• Teaching Bees to Children - Thu Aug 16th 4:15-5:15pm - Room 104-105
Many beekeepers are more afraid of school kids than stings! Relax, it’s fun! We will offer tips and activities for sessions in various settings (classroom, non-school meeting, fair) including lesson plans and resource lists.
• The City Comes to the Country: Lessons from Legalizing Urban Beekeeping Can Protect Your Bees, Too - Fri Aug 17th 2:45-3:45pm - Conf Room D
Many urban beekeepers had to struggle for the right to keep bees, or to hold back new restrictions. We have learned a thing or two that may help your growing community include healthy bee colonies for years to come.

RAFAEL CABRERA

• Hive Monitoring for Hobbyists - Mon Aug 13th 8:30-9:25am - Conf. Room AB
Why accurate weight measurement is so important. Typical weight curves, insight gathered from weight curves, and why simpler is better will be discussed.
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DR. DEWEY CARON

• Integrated Pest Management (IPM) - Mon Aug 13th 8:30-9:25am - Room 108-109
• Where Beekeeping Began - and Continues! - Thu Aug 16th 4:15-5:15pm - Room 203-204

Our rich EAS and Virginia history - how current interest in Natural (Darwinian) beekeeping fits into this history and the future of beekeeping.

LEWIS CAUBLE

• Sugar Shake Testing for Varroa - Mon Aug 13th 2:35-3:30pm - Apiary
  Discussion of the importance of monitoring varroa throughout the season and a hands-on demonstration of the sugar shake method.
• Mites, Monitoring, and Miticides - Mon Aug 13th 4:00-5:00pm - Room 106-107
  Varroa mites are the greatest challenge to bee health. This talk stresses the importance of having a robust and effective mite management plan, elements of a plan, and good resources that folks can lean on as they develop their own plan.
• Sugar Shake Testing for Varroa - Tue Aug 14th 9:35-10:30am - Apiary
  Discussion of the importance of monitoring varroa throughout the season and a hands-on demonstration of the sugar shake method.
• Sugar Shake Testing for Varroa - Thu Aug 16th 2:45-3:45pm - Apiary
  Discussion of the importance of monitoring varroa throughout the season and a hands-on demonstration of the sugar shake method.

DR. JOSEPH CAZIER

• The Genius Hive - Mon Aug 13th 4:00-5:00pm - Conf. Room AB
  This talk will look at the path to build a genius hive, one that goes beyond a smart hive and can tell you not only about itself, but about what it needs to do better. This includes data standardization, best practice identification, data analytics and continuous improvement.

ALBERT CHUBAK

• Long Box Beekeeping - Thu Aug 16th 1:30-2:30pm - Apiary
  Horizontal hive instruction with various sized naturally drawn frames in a single hive system. Inspection, manipulation, harvest, wintering and queen rearing will be discussed. Out of the box thinking inside the box.

MICHELE COLOPY

• State Pollinator Protection Plans: What Beekeepers Need to Know - Mon Aug 13th 11:00-12:00pm - Room 108-109
  This presentation will feature the issues of concerns to beekeepers, how beekeepers can be involved in the planning process and the Plans in other states.
• Strengthening Your Bee Club - Thu Aug 16th 2:45-3:45pm - Conf Room D
  Bee Club Leaders are brave and hardy Souls. Learn the responsibilities and liabilities of Beekeeping Association leaders, ways to break a bee club, and how to improve club management from this nonprofit leader with 20 years of nonprofit experience. This talk will include discussion of fundraising, grant writing, and considering if your club should become a nonprofit.
SAM COMFORT

• Top Bar Hives & More - Fri Aug 17th 1:30-2:30pm - Apiary
• Top Bar Hives & More - Fri Aug 17th 2:45-3:45pm - Apiary

We will discuss pros and cons, inspect, and catch queens from several hive designs including Kenyan top bar and Comfort hives (a modified box hive). What is the best type of hive? The one you make yourself.

DAN CONLON

• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf Room AB
• Russian Bee Breeding Program The Hard Work of Improving Honeybee Health - Fri Aug 17th 2:45-3:45pm - Conf Room AB

I will discuss how the Russian Honeybee Breeders Association members work together and meet standards to improve mite tolerance, honey production while maintaining genetics in our breeding program. What is working, and what we expect in the future.

DR. MAGGIE COUVILLON

• Dancing Honey Bee Bioindicators Communicate Habitats’ Ability to Feed Pollinators - Fri Aug 17th 4:15-5:15pm - Room 108-109

Successful honey bee foragers communicate to their nestmates the distance and direction from the hive to the forage they collect. Here I describe my research where I, the eavesdropping scientist, listens in on these dance conversations and decodes the information to generate important data about when and where bees are collecting their food in the landscape.

STEVEN COY

• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB

PHIL CRAFT

• Selling Your Honey: Getting started - Mon Aug 13th 2:35-3:30pm - Room 102-103

CELIA DAVIS, NDB

• The Sex Life of Plants - Wed Aug 15th 9:45-10:45am - Ballroom ABC

Details methods flowering plants use to get their pollen from one place to another and to prevent (in many cases) self-pollination. It includes some information about the other groups of insects that pollinate plants and many close-up photographs of flowers to show their structure. The flowers are all UK ones, although some are found in the US as well.

• Mr. Bee - Wed Aug 15th 2:45-3:45pm - Conf Room AB
The life of the drone honey bee: its life-cycle, anatomy, importance to the colony and the problems drones are facing particularly from Varroa and the chemicals used to treat it.

- **Tea with Celia** - Thu Aug 16th 4:00-5:00pm - Embassy Suites Mercury Ballroom (Advance Ticket Required)
- **Pheromones** - The Silent Messengers - Fri Aug 17th 1:30-2:30pm - Room 106-107

Pheromones within, and sometimes outside, the honey bee colony

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**BILLY DAVIS**

- **Sustainable Honey Bee Lowering Stress Working the Colony** - Mon Aug 13th 11:00-12:00pm - Apiary
Assisted by Sustainable Honey Bee Program volunteer Richard Whitlow, this apiary session will cover several tips and tricks for keeping both the bees and the beekeeper calm including using quiet boxes, drapes, minimal smoke and more.

---

**DR. LILIA DE GUZMAN**

- **Queen Rearing with the Russian Breeding Association** - Tue Aug 14th 8:30-5:00pm - Conf. Room AB
- **Hygienic and Grooming Behavior in Russian Honey Bees** - Wed Aug 15th 2:45-3:45pm - Conf Room D

Russian honey bees (RHB) not only display strong and rapid hygienic responses towards brood infested with varroa mites, but also grooming responses to the varroa mites exposed from hygienic activities. These attributes are important in suppressing varroa mite population in RHB colonies.

---

**DR. DEBBIE DELANEY**

- **Diversity in the Apiary** - Thu Aug 16th 1:30-2:30pm - Room 203-204
We will discuss the importance of diversity at the colony and apiary scale. research highlighting the benefits of diversity will be presented.

---

**KARLA EISEN**

- **Open Forum Q&A for Excellence in Honey & Hive Products** (with M. Young, M. Palmer, B. Wellemeeyer, K. Eisen) - Tue Aug 14th 4:00-5:00pm - Room 102-103
Questions, Answers, and Discussion about excellence in honey and hive products

---

**DR. JAMIE ELLIS**

- **Bee Biology** - Wed Aug 15th 1:30-2:30pm - Room 203-204
Honey bees are fascinating insects. They have an assortment of individual behaviors that contribute to the overall success of the entire colony. In this lecture, Dr. Ellis will discuss nest structure, the members of the colony, honey bee behavior, and colony goals, all in an effort to foster a more holistic appreciation of the honey bee.

- **Bee Biology (cont'd)** - Wed Aug 15th 2:45-3:45pm - Room 203-204
Honey bees are fascinating insects. They have an assortment of individual behaviors that contribute to the overall success of the entire colony. In this lecture, Dr. Ellis will discuss nest structure, the members of the colony, honey bee behavior, and colony goals, all in an effort to foster a more holistic appreciation of the honey bee.
- **What is killing our bees (and what can we do about it)?** - Thu Aug 16th 8:30-9:30am - Ballroom ABC
In many ways, beekeeping is harder than ever. Colony loss rates are high in many areas around the world. Old pests and pathogens continue to cause problems. New pests and pathogens threaten colony health. With all of the confusion swirling around bee health, we are left to wonder what the principle killers of honey bee colonies actually are. Herein, Dr. Ellis will discuss what is killing bees around the world and what can be done to reduce the losses.

- **Honey bees as superorganisms: the hive or the honey bee?** - Thu Aug 16th 1:30-2:30pm - Room 106-107

Honey bee colonies are composed of thousands of individual bees. However, a colony expresses attributes that are more complicated than those of the individual bees that compose it. The result is a honey bee colony that is more than a simple sum of its parts. In this lecture, the emergent properties of a honey bee colony will be discussed, with a focus on an argument for viewing the colony itself as an organism.

- **HUW EVANS**

- **Electronic Hive Monitoring: Sensor Synergy** - Mon Aug 13th 11:00-12:00pm - Conf. Room AB

While basic sensor reading such as weight, temperature, humidity and acoustics can be useful in their own right, this presentation demonstrates the (a?) synergy that lies between these measurements and the benefit this information can bring to hobby beekeepers, commercial beekeepers and bee scientists.

- **Internet of Bees: Bee Counting (IOBee)** - Mon Aug 13th 1:30-2:25pm - Conf. Room AB

IOBee is a European consortium who have developed a low-cost bee counter to monitor bee traffic at the entrance of the hive. This count information can provide valuable information about forager strength, nectar availability, in field death rates, bee health and how the local environment influences bee activity.

- **DR. RICK FELL**

- **How Bees Make Honey** - Fri Aug 17th 2:45-3:45pm - Room 108-109

A detailed look at the process by which honey bees convert nectar into honey, as well as a review of honey composition, factors affecting crystallization and the protective systems in honey. This presentation will also consider how we can use this knowledge to improve colony management.

- **MARK FIEGL**

- **Excellence in Extracted Honey** - Tue Aug 14th 9:35-10:30am - Room 102-103

Mark takes great pride in presenting the gift of liquid honey that the bees provide and has won many silver plates at recent EAS conferences. This talk will be about preparing honey for show and sale.

- **PAM FISHER**

- **Welcome to EAS** – Wed Aug 15th 8:15-8:45am – Ballroom ABC

- **Community Engagement for Sustainable Beekeeping** - Thu Aug 16th 2:45-3:45pm - Room 106-107

The adage, “It takes a village” aptly describes the urban/suburban environment where neighbors influence a beekeeper’s success or failure. Discover how regularly engaging your community can positively affect local zoning ordinances, reduce pesticide usage, and provide new members for your local bee club.
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KIM FLOTTUM
• The Business of Bees - Mon Aug 13th 8:30-9:25am - Room 102-103
Starting a business with bees, beekeeping, bee supplies and more. What you'll need, what can go wrong, and what a way to make a living.
• Open Forum - Bees as Business Q&A (with F. Proni, K. Flottum, & more) - Mon Aug 13th 4:00-5:00pm - Room 102-103
• Marketing the Business of Bees - Fri Aug 17th 1:30-2:30pm - Conf Room D
No matter how you are making money with your bees, you can't ignore Promoting your business. Beekeepers need to know you exist, and the public wants to know what you do. We'll explore some common, and not so common promotional opportunities to help expand your business and increase your public exposure.

ERIN FORBES
• Getting Started with Bees - Mon Aug 13th 8:30-9:25am - Room 106-107
• Who's Zooming Where? Morning Observations in the Apiary - Tue Aug 14th 8:30-9:25am - Apiary
• Nucs and Splits - Tue Aug 14th 2:35-3:30pm - Room 106-107

JIM FRASER
• Smoker Lighting Tips & Tricks - Mon Aug 13th 4:00-5:00pm - Apiary
Ever wondered why your smoker won't stay lit? I'll show you some tricks to lighting your smoker and keeping it going.
• Managing for Honey Production - Tue Aug 14th 11:00-12:00pm - Room 106-107
How to get your hives ready for the nectar flow. It's more than just giving them supers.

HARRY FULTON
• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB

ANDREW GIBB
• Locally Bred Queens Survive Better Than Imports - Wed Aug 15th 2:45-3:45pm - Room 106-107
This talk will compare the ability of imported queens of Brother Adam at Buckfast Abbey with locally bred queens. Should greater encouragement be given today to locally bred queens?

KRISPN GIVEN
• Selecting for Behavioral Resistance to Varroa D. - Wed Aug 15th 1:30-2:30pm - Conf Room D
A unique look into the world of the honey bee breeding, Paradigm's used to select for the hierarchal trait mite-biting.
• Queen and Drone Reproductive Biology - Fri Aug 17th 1:30-2:30pm - Conf Room AB
Will discuss the complexities of polyandry, DCA'S and queen/drone mating behavior post-mating and swarm cast mechanisms.
DR. JEFF GROFF

• Spatial & Temporal Variations of Hive Temperature - Mon Aug 13th 2:35-3:30pm - Conf. Room AB
This presentation demonstrates a system that uses arrays of temperature sensors embedded directly into a standard Langstroth hive frame foundation. High-resolution spatiotemporal temperature data collected by this system may allow details of colony health such as brood size, and indicators of colony upheaval such as swarming to be ascertained.

ANN HARMAN

• Feeding Bees - Mon Aug 13th 1:30-2:25pm - Room 106-107
All beekeepers, no matter where they live, need to understand the “Why, What, When, How and If” about feeding bees.

THEO HARTMANN

• Got Brood? (w/ Rich Morris) - Mon Aug 13th 2:35-3:30pm - Conf. Room AB
Millions of data points have been collected by BroodMinder devices. Sensors in the hive show various states of the colony. Presentation will give a number of everyday examples of data analysis and how the results can and should be used to minimize invasive hive inspections or to alert the beekeeper that it is necessary to do an unscheduled hive inspection because of a potential colony problem.

BILL HESBACH

• Bee Biology Basics - Mon Aug 13th 9:35-10:30am - Room 106-107
This session will cover the basic biology that beekeepers need to help understand the various behaviors that are observed in the colony. Also, this discussion will include the fundamental dynamics of flight and the queen’s role in sexual reproduction.
• Seasonal Management of the Colony - Tue Aug 14th 8:30-9:25am - Room 106-107
In this session, we will cover the basics of a beekeeper’s involvement with managing a colony over a typical season with an emphasis on sustaining a healthy population through a seasonal dearth of nectar or pollen.

CHRIS HEWITT

• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB
• How We Do It: A Sideline Queen Rearing Business - Wed Aug 15th 1:30-2:30pm - Room 106-107
Father Daughter team Chris Hewitt and Lynn Hewitt White, members of the Russian Queen Breeders association will present a visual tour of their queen rearing operation including grafting, starter set up and management, mating nucs and more

DON HOPKINS

• Hygienic Behavior Testing Part 1 - Thu Aug 16th 2:45-3:45pm - Apiary
• Hygienic Behavior Testing Part 2 - Fri Aug 17th 1:30-2:30pm - Apiary
Testing for hygienic behavior will be demonstrated. There is a part 1 and part 2
KEITH JORDAN
• Processing and Selling Honey: Food Safety & Labeling - Mon 13th 1:30-2:30pm - Room 108-109
Honey house safety and best practices will be presented along with labeling requirements for honey and hive products

JENNIFER KELLER
• Managing Small Hive Beetle - Tue Aug 14th 11:00-12:00pm - Apiary
• Managing Small Hive Beetle - Thu Aug 16th 4:15-5:15pm - Apiary

PAM LAVELLE
• Yoga for Beekeepers - Mon Aug 13th 6:00-7:00 am - First floor outside business center
• Yoga for Beekeepers - Tue Aug 14th 6:00-7:00 am - First floor outside business center
• Yoga for Beekeepers - Wed Aug 15th 6:00-7:00 am - First floor outside business center
• Yoga for Beekeepers - Thu Aug 16th 6:00-7:00 am - First floor outside business center
Join me for a well-rounded, one hour, gentle yoga class, suitable for all levels, including beginners. I will focus mainly on stretches for beekeepers, relating what we do in class to how we would utilize this knowledge in the apiary. I will bring extra yoga mats, but if you have one of your own, please bring it.

FRANK LICATA
• Setting up a Successful Serious Sideliner Honey and Honey Product Business - Mon Aug 13th 9:35-10:30am - Room 102-103
This presentation will show people what it takes to go from hobby beekeeper to a serious sideliner, and making a profit from their beekeeping. It will explain how, with work, you can produce a good part time income and possibly transition into a full time business.

DR. FRANK LINTON
• Colony Monitoring: An Overview - Mon Aug 13th 8:30-9:25am - Conf. Room AB
Like the many sensors in your automobile, sensors in your beehives can keep you informed of your colonies’ health and productivity and alert you to problems early-on. In this workshop you will see how sensors monitor and report honey production, brood volume, forager activity, queen problems, swarms, theft, and more.
• Observation Hives - Tue Aug 14th 1:30-2:25pm - Room 108-109
Every beekeeper should have an observation hive. Good beekeepers know their bees intimately. The fastest way to truly understand your bees is to live with them – in your house, where you can see them and hear them and smell them, all day, every day, all year round. This class will show you how to set up an observation hive – and how to learn from it.

CHIEF LEE LOCKAMY
• Opening Ceremony - Wed, Aug 15th 8:15am – Ballroom ABC
Chief Lockamy will lead a traditional Indian Blessing for our opening ceremony honoring Native Land
**DR. WYATT MANGUM**

- Top Bar Hives - Tue Aug 14th 9:35-10:30am - Room 108-109
- Top Bar Hives - Tue Aug 14th 2:35-3:30pm - Apiary

This presentation will include a show of photos from my Beehive Collection including short videos where he will demonstrate how antique beehives worked. Some old beehives are fairly complicated and resemble furniture. Some of these beehives have documentation to the 1840's and 1830's. Included is a handwritten (scribe copy) technical document of the first beehive patent issued in 1815, along with rare (American) literature (primary) sources (for pictures) into the 1700's. This might be the first time Wyatt shows some of these artifacts or literature sources.

- Hot Bees? Thermal Cameras Reveal Bee Behavior in New Ways - Thu Aug 16th 4:15-5:15pm - Room 108-109

In the American Bee Journal and Bee Culture, Wyatt has published several articles on using thermal cameras to see bee behavior and using the cameras as a management tool in Bee Culture. Commercial beekeepers use thermal cameras to increase their work efficiency. In addition to his top-bar apiaries, he has a "frame hive" apiary for a detailed examination of using thermal cameras for ascertaining the condition of frame-hive colonies.

**BUDDY MAY**

- Hands On Mentoring - Tue Aug 14th 4:00-5:00pm - Room 106-107
- Welcome to EAS 2019 - Fri Aug 17th 11:00-11:15am - Ballroom ABC

**DR. WILLIAM MEIKLE**

- Continuous Beehive Weight & Temp. Data: Long term & Same Day Changes - Mon Aug 13th 4:00-5:00pm - Conf. Room AB

Continuous weight data is very rich. Since there is only one value for the hive at a given point in time, there is a lot of information in how that data changes over time. One useful method to extract some of that information is to divide it into within-day and long-term components. Analysis of within-day data can show many aspects of colony behavior, such as, for example, foraging activity and success, adult bee population growth, start and finish of daily foraging activity, and the size of morning forager population. These can be used by researchers to compare colony growth and activity among treatment groups in field experiments, or for beekeepers to evaluate new management methods. Temperature can likewise be divided into within-day and between-day components. CO2 concentration, while expensive to measure, can also be considered.

**BETTY MENCUCCI**

- Thirty Years of EAS Photo Slideshow - Fri Aug 17th 12:30-1:30pm - Ballroom ABC

This slideshow is a trip down memory lane of past EAS conferences for the past 30 years showing the various locations, speakers, field trips, participants, banquets and honey shows.
"What a great idea" for those wishing to produce comb honey for the local market without the hassle involved with other methods of comb honey production and packaging. The mini frame look great, since they are an “authentic” wooden comb [frame], and can be packaged without further preparation for sale.

Randy Oliver”

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info@api-quip.ca
(450) 248-3325
RICH MORRIS

• Got Brood? (w/ Theo Hartmann) - Mon Aug 13th 2:35-3:30pm - Conf. Room AB

Millions of data points have been collected by BroodMinder devices. Sensors in the hive show various states of the colony. Presentation will give a number of everyday examples of data analysis and how the results can and should be used to minimize invasive hive inspections or to alert the beekeeper that it is necessary to do an unscheduled hive inspection because of a potential colony problem.

BONNIE MORSE

• Community Sourcing of Bees: Here’s How We Did It - Thu Aug 16th 2:45-3:45pm - Conf Room AB

In Marin County, California, sourcing bees locally increased from a reported 42% to 85% since 2009. Here's how we did it.

FIONA O’BRIEN

• The Manuka Story: De-Commoditizing New Zealand Honey - Fri Aug 17th 2:45-3:45pm - Room 104-105

When my mother was a child, her grandfather sold his few pounds of strong, dark, bitter, bush (native forest) honey to the local chemist so that it could be made into preparations like cough mixture. Not all beekeepers were able to extract or sell this honey once cursed for its taste, thixotropic nature and dark amber colour especially in a country that had a tendency to appreciate the white to light amber milder tasting honeys. Despite Beekeeper preference NZ bees continued to collect Manuka. Couple a marketing plan to some research money, and today we have a honey worth millions of dollars.

RANDY OLIVER

• Adapting to Varroa & Extended-Release Oxalic Acid Research Update - Wed Aug 15th 8:45-9:45am - Ballroom ABC

A group of us are collaborating with USDA-ARS to collect data in support for EPA to approve this application method, which is showing great promise (and may be a game changer in varroa management). This presentation will be about our progress to date.

• Pesticide and Neonic Facts - Wed Aug 15th 1:30-2:30pm - Conf Room AB

The skinny on another contentious topic. Randy objectively explains the history and future direction of pesticides, why neonicotinoids have become such widely-used insecticides, and their pros and cons.

• Tips for Handling Bees - Thu Aug 16th 1:30-2:30pm - Conf Room AB

Tips from a lifetime of experience of working bees barehanded (and generally without any protective gear). How to understand what initiates the honey bee defense response, and how to avoid it. What upsets bees, and what doesn't. How the bees perceive you. How to perform a hive inspection with minimal stinging.

• Reading Combs: Understanding Bee Biology Over a Season - Fri Aug 17th 4:15-5:15pm - Room 203-204

A summary of my series “Understanding Colony Buildup and Decline.” By acquiring a better understanding of the biology of bees, nutrition, parasites, and pathogens over the course of the season, and by learning to “read the combs,” the beekeeper can then make better informed management decisions adapted to his/her particular situation.
MIKE PALMER

• Pursuing Excellence in the Craft: Why We Do it (presenting w/ George Wilson) - Tue Aug 14th 8:30-9:25am - Room 102-103
  An introduction to pursuing excellence in honey and hive products, why it is important, and how it helps you, the consumer, and the industry.

• Comb Honey Production - Tue Aug 14th 11:00-12:00pm - Room 102-103
  This talk will go over comb honey production including tips and tricks of mastering cut comb honey

• Open Forum Q&A for Excellence in Honey & Hive Products (with M. Young, M. Palmer, B. Wellemeeyer, K. Eisen) - Tue Aug 14th 4:00-5:00pm - Room 102-103

• Seasonal Management at French Hill Apiary - Thu Aug 16th 4:15-5:15pm - Conf Room AB
  Listen to the seasonal management tasks in a sustainable apiary producing honey by the ton, comb honey, nucs, and queens

• Queen Rearing - Fri Aug 17th 4:15-5:15pm - Conf Room AB
  Mike’s queen rearing system at French Hill Apiary.

GERMÁN PERILLA

• Meliponas as a Tool of Conservation & Social Entrepreneurship in Tropical Rural Communities - Fri Aug 17th 1:30-2:30pm - Room 104-105
  Develop sustainable beekeeping and meliponicultur programs owned by the communities in order to increase the participation of apicultural producers in new markets, avoiding the middleman. Improve and standardize the process hive management, production and harvesting of high quality hive products.

FRED PRONI

• From Passion to Profession: Strategies for the Stationary Beekeeper - Mon Aug 13th 1:30-2:25pm - Room 102-103
  Often we either dream of increasing our operation or circumstances dictate our unexpected growth leaving us in a quarry of questions reminiscent of a forager’s first orientation flight. This discussion focuses on growth considerations for the stationary beekeeper from equipment requirements, husbandry skills, standardization, pollination possibilities and efficiency practices. Together we will explore growth strategies allowing you to grow, slow or fast, while addressing how the practices of the backyard initiative changes dramatically as does the financial “honey money” bottom line.

• Open Forum - Bees as Business Q&A (with F. Proni, K. Flottum & more) - Mon Aug 13th 4:00-5:00pm - Room 102-103

• NC Grown: Uncapping the Nation’s Largest Beekeeping Organization - Wed Aug 15th 2:45-3:45pm - Room 104-105
  Explore the Nation’s largest volunteer beekeeping organization, the programs offered, and how it reflects apiculture education excellence. Boasting 4,700 active members, the NCSBA promotes bee health, queen rearing instruction, large bi-annual conferences, legislative support, a Master Beekeepers Program and constant outreach allied with North Carolina State University and the NC Department of Agriculture. We will discover how NC accomplishes these tasks perhaps allowing you to bring forth tried methods or programs that have built the hive that our NC beekeepers are housed in.

SAM RAMSEY

• Tropilaelaps Mites: A Fate Worse Than Varroa - Thu Aug 16th 1:30-2:30pm - Room 104-105
  Tropilaelaps mites are spreading across the globe at a rate very similar to that of Varroa in the 1960’s, roughly 20 years before they arrived in the US. If they continue to spread this way, it’s possible that they could be here soon. We know these mites are much more destructive than Varroa with faster population growth, greater mobility, and no pesticides currently labeled for their
treatment but most areas of our knowledge are still woefully insufficient.

• Varroa destructor Feeds on Hemolymph & Two Other Alternative Facts - Fri Aug 17th 2:45-3:45pm - Room 106-107

Varroa don’t actually feed on hemolymph but on a very different tissue, the fat body, leading to a diverse combination of health impacts that have never been fully explained by feeding on hemolymph. With a better understanding of how this parasite impacts its host, we can develop new forms of control and possibly more effective ways to counteract the effects of Varroa parasitism in infested colonies.

DR. JULIANA RANGEL

• Behavioral Ecology of Swarming - Thu Aug 16th 9:30-10:30am - Ballroom ABC

We will explore the conditions inside a colony that is preparing to swarm in the spring, and participants will learn about the signals that initiate a swarm’s sudden departure from the parental nest.

• Taxonomy of Apidae - Thu Aug 16th 1:30-2:30pm - Conf Room D

This lecture will give an overview of the taxonomy of the Apidae family, starting from the class Insecta, briefly covering specific traits of the order Hymenoptera and the suborder Apocrita (bees, wasps and ants), and exploring more specific traits of the family Apidae, the subfamily Apoidea, and the genus Apis.

• Age Polyethism - Thu Aug 16th 4:15-5:15pm - Conf Room D

Among the many traits that make honey bees such special insects, is the fact that their colonies exhibit age-based division of labor, also known as age polyethism. We will go over the many tasks that are undertaken by bees as they age, from the moment they emerge from their cells as adults, all the way until they “graduate” as foragers and/or nest-site scouts, the last and most dangerous of the tasks performed by honey bee workers.

DR. TOM RINDERER

• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB

• Advancing Technology for Integrated Precision Apiculture: Tools to Manage Honey Bee Health & Performance - Mon Aug 13th 11:00-12:00pm - Room 102-103

Apiculture is agriculture and honey bees are livestock; thus beekeepers are bee farmers and must care for their livestock to keep them healthy and productive. Care includes understanding all of the factors impacting their health and providing food, shelter, and safety needs of the bees. For bee farming to be successful in these challenging times, a highly efficient and effective integrated approach is needed. The approach should include 1) Accurate recognition and identification of factors, 2) Ongoing monitoring and measurement, 3) Record keeping, 4) Interpretation and understanding of results, and 5) Task management and scheduling. There are many technological tools currently available that support these components including some that generate and visualize data. The processes and tools to link data sets together and interpret the results for the benefit of individual beekeeping operations, and for the bee industry, however are lacking. The Bayer Bee Health and Integrated Apiculture Research program is evaluating technologies and has developed tools and processes of its own, for each of the five key process areas of an integrated apiculture program. Many of these tools are used on a regular basis to help maintain the health of our own research colonies through improved monitoring, management and mite control (the 3Ms). However, there is a need to collaborate with data analytics teams and technology developers to advance these and other technologies even further to help achieve a form of Integrated Precision Apiculture (IPA) that supports sustainability and resiliency in the bee industry. The five key processes of an IPA program, and some of the technologies being developed,
used, and envisioned to enhance precision will be discussed. We can achieve a new normal.

**DR. OLAV RUEPPELL**

- Transmission dynamics of honey bee viruses and the queen - Fri Aug 17th 9:30-10:30am - Ballroom ABC

Honey bee queens present hubs for virus transmission in colonies that should be particularly protected. I will summarize several studies that my lab has performed to study the queen’s role in virus transmission within honey bee colonies.

**TUCKA SAVILLE**

- Warre Hives - Tue Aug 14th 2:35-3:30pm - Room 108-109
- Warre & Other Hive Configurations - Tue 14th, 4:00-5:00pm - Apiary

**LANDI SIMONE**

- What Do You See? Reading the Frames - Mon Aug 13th 11:00-12:00pm - Room 106-107

Everything you need to know about your bees is written in the frames, but do you know how to interpret what you are seeing? Learn to evaluate your bees’ condition by learning to read what is written in the frames.

- Keeping Bees in Populated Areas: Be a Good Neighbor - Mon Aug 13th 2:35-3:30pm - Room 106-107

Bee-ing a Good Neighbor: When beekeepers, especially those in urban and suburban areas, are inconsiderate to their neighbors, everyone suffers: the neighbors, the beekeeper, the bees, and sometimes the whole town or even state. Learn techniques to keep your bees out of your neighbor’s pool and sandbox, and your neighbors (and your bees!) will thank you.

**AUSTIN SMITH**

- Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB

**KELTON TEMBY**


Hear how an old beekeeping technique for observing hive health inspired the development of an autonomous bee health monitor, and the discovery of bee activity patterns directly tied to the colony and queen’s health.

**KEITH TIGNOR**

- Pests and Diseases - Mon Aug 13th 2:35-3:30pm - Room 108-109
- Nest Structure - Tue Aug 14th 8:30-9:25am - Room 108-109
- Langstroth & Long Box Hives (with Dr. J. Wilson) - Tue Aug 14th 11:00-12:00pm - Room 108-109
- Growing Degree Days - Thu Aug 16th 2:45-3:45pm - Room 104-105
### Beekeeping Supplies

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- **Completely Custom Labels**: With our new line of custom labels, it allows full creativity for branding your honey. If you have a photograph, your own logo or design we can help you make your products stand out!

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- **We offer Plastic and Glass containers.**

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DR. KIRSTEN TRAYNOR

• Simple, Smart Beekeeping - Wed Aug 15th 1:30-2:30pm - Room 108-109

In German, there is a popular saying “Wieso einfach, wenn auch umstandig”, which means why take the simple route, when there is a complicated one. As humans, we gravitate toward complicated answers. Maybe we're drawn to complex solutions, because if it’s difficult and we fail, it’s understandable and we don’t feel bad. But beekeeping need not be complicated, difficult or complex. Learn to keep healthy hives in an easy, carefree way so you enjoy your hives and feel confident working your bees

• Easy Queen Introduction - Fri Aug 17 4:15-5:15pm - Room 106-107

You open the hive and discover the colony is queen less. Either she was accidentally crushed or the colony swarmed and the virgin queen didn’t make it back. Or maybe your old queen is still there, but her brood pattern is terrible. Replacement queens are expensive and you don’t want the hive to reject her. Learn how to give her the best chance of success, so your hive is back up and running as fast as possible.

DR. JENNIFER TSURUDA

• Nutrition Basics - Wed Aug 15th 2:45-3:45pm - Room 108-109

Bee health is more than just the absence of disease. This session will cover basics of providing natural forage as well as feeding to help ensure your bees are well fed and nourished - why, when, what, and how.

• Insect Photography - Thu Aug 16th 1:30-2:30pm - Room 108-109

Come learn some tips and techniques for taking photos and videos of your bees and other insects! The focus (get it??) will be on using cell phone cameras and how to use photography to tell a story and assist with your inspections.

• Understanding and Monitoring for Varroa - Fri Aug 17th 1:30-2:30pm - Room 203-204

Varroa’s life cycle and how it intertwines with the honey bees is both fascinating and infuriating. This session will go over Varroa biology as well as how to monitor for infestation levels, and tips for management.

DOUG VINSON

• Improved Overwintering Success with Reduced Nest Cavity Size - Tue Aug 14th 4:00-5:00pm - Room 108-109

Annual colony losses in the US are in the 40% + range. This sad statistic fuels the discouraging cycle of losing bees/buying bee and perhaps a revolving door; especially for the new beekeeper. Overwintering in smaller nest cavities is a newer management practice that is gaining favor with an increasing number of beekeepers. The material presented will describe tools and techniques that will enable attendees to incorporate this concept into their overwintering protocol.

BOB WALTERS

• FieldWatch: Improving stewardship & communication through the use of mapping systems – Mon Aug 13th 4:00-5:00pm - Room 108-109

FieldWatch operates and manages voluntary online registries for beekeepers and specialty crop producers. Operating in 19 states, FieldWatch offers a free and voluntary registry that promotes communication, collaboration, and cooperation between pesticide applicators and producers of specialty crops and beehives.
BOB WELLEMEYER

• How is She Doing? Colony Assessment - Mon Aug 13th 1:30-2:25pm – Apiary
Looking at the colony and assessing queen performance

• Candles & Wax Tips and Tricks - Tue Aug 14th 1:30-2:25pm - Room 102-103
How to work with wax, cleaning wax, making candles and more.

• Open Forum Q&A for Excellence in Honey & Hive Products (with M. Young, M. Palmer, B. Wellemeyer, K. Eisen) - Tue Aug 14th 4:00-5:00pm - Room 102-103

• Sideline Pollination - Thu Aug 16th 4:15-5:15pm - Room 106-107
This talk will walk you through a typical year of sideline pollination, tasks, challenges, tips, and ideas from Bob's experience running Windsong Apiaries sideline pollination.

LYNN HEWITT WHITE

• Queen Rearing with the Russian Breeding Association - Tue Aug 14th 8:30-5:00pm - Conf. Room AB

• How We Do It: A Sideline Queen Rearing Business - Wed Aug 15th 1:30-2:30pm - Room 106-107
Father Daughter team Chris Hewitt and Lynn Hewitt White, members of the Russian Queen Breeders association will present a visual tour of their queen rearing operation including grafting, starter set up and management, mating nucs and more

DR. JAMES WILKES

• Hive Tracks: A Matter of Record - Mon Aug 13th 11:00-12:00pm - Conf. Room AB
Each hive has a story to tell. Understanding that story is essential to being a good beekeeper. We know the plot, but important details are elusive to remember or are unknown. Tracing Dr. Wilkes own story with a genesis in his bee yard to his current work with Hive Tracks and the Bee Informed Partnership, this talk provides perspective on progress toward improving hive health and productivity by providing beekeepers the information they need to make better hive management decisions.

GEORGE WILSON

• Pursuing Excellence in the Craft: Why We Do it (presenting w/ M. Palmer) - Tue Aug 14th 8:30-9:25am - Room 102-103
An introduction to pursuing excellence in honey and hive products, why it is important, and how it helps you, the consumer, and the industry.

• Judging Mead (with M. Young) - Tue Aug 14th 2:35-3:30pm - Room 102-103

DR. JAMES WILSON

• Protecting Bees From Pesticides: Beekeeper Interventions - Mon Aug 13th 9:35-10:30am - Room 108-109
Beekeepers will gain a practical understanding of modern crop protection chemicals and strategies that will help them to protect their bees from pesticide exposure

• Langstroth & Long Box Hives (with K. Tignor) - Tue Aug 14th 11:00-12:00pm - Room 108-109
This will provide beekeepers with an introduction to the design and structure of Langstroth and Long Box hives and how they relate to the biology of the honey bee.
JAMES WITHROW

- Sharing the Throne: Establishment of Multiqueen Honey Bee Colonies - Fri Aug 17th 4:15-5:15pm - Conf Room D

ANDREW WOOTTON

- Citizen Science with Homemade Solar Hive Scales - Mon Aug 13th 9:35-10:30am - Conf. Room AB
- Managing Bee Club Growth & Teaching With the Flow Hive “Down Under” - Fri Aug 17th 4:15-5:15pm - Room 104-105

A cloud-based membership system with event management and online payments was introduced, facilitating expansion of activities. We recognized that the large numbers of new beekeepers purchasing Flow hives created a requirement for their education. In addition to beginner courses, a number of innovative programs were developed including home mentoring and nucleus colony establishment. The influx of members and funds allowed the implementation of a club apiary, creating a virtuous circle of extension. These experiences are likely to be illuminating for other beekeeping communities.

MICHAEL YOUNG, MBE

- History of Honey Shows - Tue Aug 14th 8:30-9:25am - Room 102-103
- Judging Mead (with G. Wilson) - Tue Aug 14th 2:35-3:30pm - Room 102-103
- Open Forum Q&A for Excellence in Honey & Hive Products (with M. Palmer, B. Wellemeyer, K. Eisen) - Tue Aug 14th 4:00-5:00pm - Room 102-103
- Judging a Honey Show - Thu Aug 16th 2:45-3:45pm - Room 203-204

Tips and techniques for judging the various products in a honey show
- Honey Bees From the UK to the USA - Fri Aug 17th 8:30-9:30am - Ballroom ABC

JON ZAWISLAK

- Un-popular Science - Thu Aug 16th 11:00-12:00pm - Ballroom ABC

Many factors have been plaguing our bees in recent years, but certain pesticides have hogged the headlines in the popular media stories about pollinator declines. Jon Zawislak reviews some of the original field studies being conducted on honey bees in mid-south agricultural areas to investigate the effects of farm chemicals on honey bee health, and some of their surprising findings.
- IPM of Small Hive Beetle - Fri Aug 17th 2:45-3:45pm - Room 203-204

Small hive beetles are the newest scourge for southern beekeepers. Unfortunately, no silver bullet has been found to control them. Familiarize yourself with their biology and learn to use an integrated approach to keeping their numbers low, to reduce their impact on your bee hives.
ST. GEORGE’S BREWING COMPANY TOUR

Monday 6:30pm - 9:00
204 Challenger Way, Hampton, VA 23666

Join a few dozen of your fellow beekeepers on Monday for a fun and educational evening at St. George’s Brewing Company. Celebrating their 20th anniversary this year, St. George’s is Hampton Roads’ oldest microbrewery. Their brews are geared toward traditional English and German style ales although they like to experiment occasionally with something different, including a Honey Meade Lager, made with honey from the onsite apiary. Their 20th anniversary beer is an English bitter, aged in wood with hints of vanilla, malt and honey.

Start the evening with a meet and greet in the taproom which features a rotating selection from St. George’s 27 different beers. Live acoustic music is planned to allow for comfortable socializing throughout the evening. Two food trucks will offer dinner selections to eat indoors or outside. Plan on touring both the apiary and the brew area following dinner to learn more about how local beekeeper, Andy Westrich, has grown his beekeeping hobby into a business relationship with the brewery. Please stay for socializing following the tour; the brewery owners are generously offering a discount on drinks to anyone wearing an EAS 2018 name badge.

Did you arrive after Monday? Don’t despair – Andy will be at the brewery every evening to greet EAS attendees who will receive discounted beverages if wearing an EAS name badge.
Tuesday, August 12

MISS HAMPTON II CHARTERED HARBOR CRUISE

Tuesday 6:30-9:00pm
710 Settlers Landing Rd, Hampton, VA 23669-4035

Join us for a chartered 2-hour Harbor Tour that departs from the Historic Downtown Hampton waterfront and proceeds out the Hampton River, passing Hampton University and Blackbeard's Point, where the notorious pirate's head was displayed on a pike after his capture off the coast of the Outer Banks.

Entering the Hampton Roads Harbor, we will be sailing the waters of Capt. John Smith and the First Settlers. Our tour will continue past historic Fort Monroe and the Old Point Comfort Lighthouse. After an awe-inspiring view of the magnificent Chesapeake Bay and the Civil War island of Fort Wool, the highlight of the tour is an in-depth view of the massive warships at the Norfolk Naval Base, home to aircraft carriers, nuclear-powered submarines, and various types of support ships.

We'll experience a dazzling sunset on the water as we return to Hampton while reviewing the famous Battle of the Ironclads by sailing across the waters of the original battle site.

Miss Hampton II features a full-service cash bar on board serving beers, wines, and cocktails as well as snacks.

Wednesday, August 13

BBQ BEACH BASH

Wednesday 4:00-8:00pm
Paradise Ocean Club, 490 Fenwick Rd, Fort Monroe, VA 23651

Did you pack your bathing suit, beach towels and sunscreen along with your veil? No bathing suit, no problem. No, you can’t go in your birthday suit but you can still enjoy the Paradise Ocean Club without swimming. This former officers’ club on a private beach has a full service restaurant, Tiki bar, and snack bar as well as volleyball and cornhole to pass the time. Beach chairs and umbrellas are complimentary for soaking up the sun and enjoying the breeze over the water. If you wish to swim, choose between the gentle bay waters or the Olympic-sized pool. For children, there's a wading pool with a slide. The facility has a locker room with showers for changing but you'll need to bring your own lock for the lockers.

Ticket holders for the Beach Bash are welcome at Paradise Ocean Club for the day beginning at 11 AM when the facility opens. Our Beekeepers Beach Bash happens from 4 to 8 PM under the pavilion with a buffet from 5 to 6:30 PM. Enjoy the camaraderie of fellow beekeepers with your toes in the sand for an EAS experience that won't be repeated anytime soon!
QUEEN OF THE SUN MOVIE

Wednesday 7:30-9:00pm

In 1923, Rudolf Steiner, an Austrian scientist, philosopher & social innovator, predicted that in 80 to 100 years, honey bees would collapse. For the first time, in an alarming inquiry into the insights behind Steiner’s prediction, Queen of the Sun: What Are the Bees Telling Us? investigates the causes behind the global bee crisis through the eyes of beekeepers, scientists and philosophers.

Queen of the Sun takes us on a journey through the catastrophic disappearance of bees and into the mysterious world of the beehive. The film unveils 10,000 years of beekeeping, illuminating the deep link between humans and bees and how that historic and sacred relationship has been almost lost due to highly mechanized industrial practices. We travel around the world to uncover the complex problems bees are facing such as malnutrition, pesticides, genetically modified crops, migratory beekeeping, parasites, pathogens and lack of genetic diversity.

In the meantime, bee advocates strive to renew a culture that takes its cues from the hive. They have recognized that the bees, themselves, are our guides and Queen of the Sun highlights non-traditional approaches that do much to create positive global change.

JAMESTOWN FIELD TRIP

Thursday 8:00am-4:45pm

Beekeeping in North America began in the early 1600s with the importation of honey bees by the English colonists at Jamestown, Virginia. EAS 2018 is excited to include a day trip to Historic Jamestown and Jamestown Settlement to explore the world of America’s first permanent English colony and the Powhatan Indian, English and West African cultures that converged in the 17th century.

At Historic Jamestown we will see the site of the original James Fort as our tour guide provides fascinating details about life in the Jamestown colony. We’ll visit the Archaearium which features artifacts from the archeological investigations by the Jamestown Rediscovery project. At the neighboring Jamestown Settlement we will explore the reconstructed James Fort, climb aboard full-sized replicas of the three ships that brought colonists to the New World, learn about Native American life in the Powhatan Indian village, and observe artisans demonstrate 17th century glassblowing techniques.

The tour is limited to the first 55 conference attendees who register for the tour.
As part of your EAS experience, please plan to attend the Thursday evening social, dinner, and auction to benefit the EAS organization and honey bee research. This event will be held on Thursday evening, August 16, from 5:00 pm to 9:30 pm on the 2nd floor of the Convention Center.

Silent Auction - Thursday 2:30pm-6:00pm
Live Auction - Thursday 8:00pm-9:30pm

Fun with a Purpose!

Some of the highlights of every EAS conference are the auctions to raise funds for honey bee research. If you brought items for the auction, please check them in at the registration desk between 4:00-7:00 pm on Sunday or 7:00-9:00 am on Monday through Thursday. Receipts will be provided for tax deduction purposes.

The silent auction will take place on Thursday afternoon from 2:30-6:00 pm in the upstairs lobby of the convention center. The live auction will be held Thursday night from 8:00-9:30 pm in Ballroom BC of the convention center following dinner. Both auctions are open to everyone and we encourage you to attend and bid on the unique items donated by both vendors and your fellow EAS members. It is through the liberal bidding by members that EAS raises funds to support the researchers who share their knowledge at EAS conferences. Many thanks to our charitable donors who make the auctions possible with their generous contributions!

At 6:30 PM, we will assemble in Ballroom BC for a plated dinner and the Honey Show Awards where we recognize those who have put so much time and effort into preparing exceptional presentations of their hive products, arts, crafts and gadgets. Dinner is $40 per person to ticket holders. If you have not already done so through preregistration, please purchase a dinner ticket at the registration desk. Please bring your ticket to the dinner.
FRIDAY EVENING BANQUET KEYNOTE SPEAKER

Friday 6:30-9:00pm

Friday’s banquet features entertainment by Dr. Sammy Ramsey. We don’t know exactly what he has in store for us but we know it will be great and entertaining and feature Sammy’s “other” life as an entertainer and singer. Sammy’s stage presence is well known. His presence and articulate message resulted in his winning the three-minute thesis contest this year. He also has several YouTube videos as Dr. Buggs, your friendly neighborhood entomologist. Sammy was even brave enough to post his performance on American Idol. Dr. Samuel Ramsey’s enduring interest in entomology started over 20 years ago and shows no signs of waning. Having completed his PhD in 2018 with Dr. Dennis vanEngelsdorp’s lab at the University of Maryland, College Park, Ramsey tries to maintain a focus on how insect research can benefit the public through development of Integrated Pest Management strategies and STEM outreach initiatives. Ramsey studied entomology at Cornell University as an undergraduate focusing on Predatory/Parasitic insect behavior. His current work focuses on the effects of honey bee parasites on individual and colony level survivorship specifically targeting *Varroa destructor* and *Nosema ceranae*.

FRIDAY AWARDS BANQUET

Friday 6:30-9:00pm

We’ll start the evening with a cash bar and social open to everyone at 5:00 pm in the upper lobby of the convention center. At 6:30 pm, we’ll gather in Ballroom BC for our annual Banquet and Awards Dinner where we recognize our Master Beekeepers, announce the Charles and Evelyn Divelbiss Education Award, and recognize our host committees. Dinner is $50 per person with a ticket purchased in advance. Please bring your ticket to dinner.

Entertainment will be provided by Dr. Samuel Ramsey.

We’ll finish up the evening when EAS 2018 President, Pam Fisher, passes the gavel to Buddy May, EAS 2019 President, to adjourn the evening until EAS 2019 in South Carolina. See this program and the EAS website for more information on upcoming EAS 2019.
CONFERENCE FEATURES

Beekeeper Led Yoga for Beekeepers at EAS

6:00 am Monday - Thursday

Early risers join beekeeper and Yoga Instructor, Pam Lavelle on Monday, Tuesday, Wednesday, and Thursday mornings from 6:00-7:00 am for Yoga (suitable for beginners). Class will include how to utilize yoga stretches in the apiary. Class located outside of the business center on the first floor of the convention center. If you have one please bring a yoga mat for yourself and one for a friend.

Painted Hives

Throughout conference

The painted hives on display upstairs at the convention center are for sale. In fact, you are encouraged to bid on them to raise funds for local honey bee research. In 2013, members of the Nansemond Beekeepers Association, headquartered in nearby Smithfield, Virginia, decided to do something about the plight of honey bees. Frustrated with feeling helpless in the face of grim news regarding bee health, club members developed a painted hive contest to raise funds for honey bee research. The annual event also engages the local community while educating citizens about honey bees.

Each year, club members build and prime hives for their contest. Participants pick up their hives, agree to paint them, and return them for judging and auction. Artist classes are divided into elementary school, middle school, high school, adults, and professional artists. Kids enter for free but adults pay to compete. The hives are displayed around the community accompanied by educational outreach. Citizens are encouraged to select a people’s choice and bid via silent auction on a hive they would like to own. The competition culminates with a panel of invited judges awarding 1st, 2nd and 3rd place ribbons in each class.

This year, the finished hives are being offered in a silent auction to EAS 2018 attendees in the hopes of raising the most funds to date. So buzz on over to see the hives and imagine your apiary graced by one of them. Or repurpose them as a deck table, an ottoman, an end table, or whatever creative idea you can imagine. Be the envy of your beekeeping friends and go home with a one-of-a-kind work of art which is also a functional bee hive. Plus feel good about funding local honey bee research too!
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<thead>
<tr>
<th>Company</th>
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<tbody>
<tr>
<td>ALL AMERICAN CONTAINER</td>
<td>813.248.2023</td>
<td>MCCOY’S SUNNY SOUTH APIARIES</td>
<td>561.798.1120</td>
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<tr>
<td>APIARIOS CARABALLO CORP.</td>
<td>787.537.7246</td>
<td>MCLURE’S HONEY &amp; MAPLE PRODUCTS</td>
<td>603.444.6246</td>
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<td>BETTERBEE, INC.</td>
<td>800.632.3379</td>
<td>MEADOW VIEW BEEKEEPING</td>
<td>610.737.7676</td>
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<tr>
<td>BLUE SKY BEE SUPPLY</td>
<td>877.529.9233</td>
<td>MERRITT CONTAINER CO.</td>
<td>850.962.9051</td>
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<tr>
<td>BRUSHY MOUNTAIN BEE FARM</td>
<td>800.233.7929</td>
<td>MILLER HONEY CO.</td>
<td>801.486.8479</td>
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<tr>
<td>DADANT &amp; SONS</td>
<td>888.922.1293</td>
<td>ROSSMAN APIARIES</td>
<td>229.985.7200</td>
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<tr>
<td>DEER CREEK HONEY CO.</td>
<td>740.852.0899</td>
<td>SANDT HONEY COMPANY</td>
<td>610.252.6511</td>
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<tr>
<td>GLENN SHARPE</td>
<td>815.464.1566</td>
<td>SMITTY BEE HONEY INC.</td>
<td>888.469.4669</td>
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<tr>
<td>GUNTER HONEY CO.</td>
<td>540.955.1734</td>
<td>STILES APIARY</td>
<td>732.661.0700</td>
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<tr>
<td>HARVEY’S HONEY</td>
<td>856.358.1010</td>
<td>SWAN’S HONEY CO.</td>
<td>207.437.2251</td>
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<tr>
<td>HONEY HOUSE, INC.</td>
<td>417.451.4969</td>
<td>T.M. KLEIN &amp; SONS</td>
<td>989.865.9377</td>
</tr>
<tr>
<td>JASON DODSON</td>
<td>931.698.4959</td>
<td>WALKER HONEY CO.</td>
<td>254.983.2337</td>
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<tr>
<td>MANN LAKE SUPPLY</td>
<td>800.880.7694</td>
<td>WALTER T. KELLEY</td>
<td>800.233.2899</td>
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2220 DUTCH GOLD DRIVE • LANCASTER, PA 17601 • 717.393.1716 • FAX 717.393.8687
www.gambercontainer.com
Honey Show

Tuesday 3:00pm to 6:00pm and Wednesday 8:00am to 11:00am

Welcome to the Annual EAS Honey Show! The tradition has been in place since 1957. This year, the show is found in the place of prominence it deserves. You’ll find it in Rooms 201 & 202 on the 2nd floor of the Convention Center. It’s the venue where Excellence in Honey and Hive Products prevails. Entrants from all over the East get to “strut their stuff” and each will surely echo the same refrain. Their efforts in producing prime exhibits translates directly to a standard that is evident in the products they share under their label. Their products stand out, next to the competition, and generate more interest, value, and money.

Please stop by the Honey Show to see the 10 beautifully engraved Silver Plates and Silver Bowl for Best in Show. Ribbons are awarded for 6 places in 32 classes and at a show of this size and scope, even a 6th place ribbon is meaningful. The awards are a direct result of the appreciation and generosity of our Sponsors. They know the value of excellence in the craft! You will find their names and logos in this program and I urge you to stop by their booths or when you see them in the hallway give them a thumbs up and thanks. In addition to the Silver Awards and ribbons, Gamber Container and Ross Rounds present gift certificates to several winners of Extracted Honey and Comb Honey classes.

EAS Master Beekeepers have their fingerprints all over this Honey Show event. You’ll see their dedication and leadership among the staff, volunteers, and judges. This year’s team of judges all have stellar credentials! They include professionals judging in their field and many Silver and Blue Ribbon winners from prior top level shows.

The annual EAS Conference garners serious media coverage and the Honey Show always receives generous attention. What’s not to like about the beauty of the produce of our bees? In the future, I urge you to participate, promoting our craft by entering the Honey Show. A large display, even if the products are not all Blue Ribbon Winners is most impressive. Every year more and more beekeepers are “coming to the party” and know that the Honey Show is the place to bee.. Please join us!

For the past three years it has been my honor and pleasure to be the EAS Honey Show Chairman. I wish to thank all those who have supported the Honey Show during my tenure. Your individual efforts have created a groundswell of growing support for a very important aspect of our craft. Sincere thanks to one and all.

Honey Exchange

Ballroom EFG

Do you seek out honey from different areas of the country when you travel? So many of us do that EAS has established the Honey Exchange to facilitate our pursuit. Bring one, two, or three of your bee products and drop them off for an equal number of tickets to exchange for products from another beekeeper. Entries will be accepted until Thursday afternoon at the Honey Exchange area in the Vendor Hall, Ballroom EFG. On Friday, redeem your tickets for exchanges from 12:30-4:00 pm.
Poster Sessions

Monday 12:30pm-1:30pm

Poster Sessions from the Electronic Colony Monitoring track will be open during the lunch time hour on Monday, August 13th from 12-1:30pm for all interested. Located in Conference Room AB (downstairs) in the convention center.

<table>
<thead>
<tr>
<th>Demo/Poster Presenters</th>
<th>Affiliation</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Herbert .M. Aumann</td>
<td>University of Maine, Orono</td>
<td>R.F. Doppler Sensor for Assessing Bee Hive Health</td>
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<tr>
<td>Kelly Kulhane</td>
<td>Bee Informed Partnership</td>
<td>BIP hive scale portal, and the Sentinel Apiary Program which combines hive scale data (from many of the speakers participating in this short course) with longitudinal colony health data collected by beekeepers. <a href="https://beeinformed.org/programs/sentinel/">https://beeinformed.org/programs/sentinel/</a></td>
</tr>
<tr>
<td>Frank Linton</td>
<td>ColonyMonitoring.com</td>
<td>Hive Inspection with Temperature Sensors: A Research Agenda</td>
</tr>
<tr>
<td>Dick Rogers</td>
<td>Bayer Crop Science, Bee Care Center</td>
<td>The Healthy Colony Checklist: A practical solution and technology to quickly assess, record, understand, and plan management of honey bee colony health. <a href="https://tinyurl.com/ybux64fh">https://tinyurl.com/ybux64fh</a></td>
</tr>
<tr>
<td>Stuart Shim</td>
<td>Beaver Plastics (Canada)</td>
<td>RFID-enabled Polystyrene Brood Box</td>
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Discover the difference of Flow®

We all know the Flow Frames make honey harvesting easier; what we didn’t expect was the number of Flow beekeepers saying that their customers, friends and family prefer the flavour of single origin, pure honey. Flow takes the hard work out of honey harvesting, just turn the key and harvest up to three kilograms of honey per frame. No extractor or filtering necessary. Used by tens of thousands of beekeepers in over 130 countries, from tropical to cold climates. Come and meet the team to view our patented Flow Frames, Supers and Hives.

Go in the draw to win a Flow Hive by entering your email address at our stall.

Flow Hive Classic Araucaria 7 Frame
Complete hive containing 7 Flow Frames featuring our revolutionary honey harvesting technology.

10% discount on Flow Hive Classic, Flow Super, Flow Frames or Flow Protection Wear Range. CODE EASFLOW10%
Expires 5pm August 20, 2018

honeyflow.com
Get your Book Signed: Authors at EAS 2018

Wednesday through Friday

A number of EAS speakers have books on bees and beekeeping. Below is the list of those speakers who have books they would be willing to autograph. If you did not remember to bring books by these authors to EAS or do not have the latest copy, you can purchase books from one of the EAS vendors and bring it to the author to sign. In fact, several of the authors can be found at a vendor booth! You can, of course, always try to catch authors in the hall at other times and ask for their autograph.

<table>
<thead>
<tr>
<th>EAS Author Signing Sessions Will Occur in the Vendor Area Ballroom EFG</th>
<th>Wednesday - Friday</th>
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<tr>
<td><strong>ON WEDNESDAY 8/15</strong>, from 12:15 to 12:45, the authors at the signing table will be Ann Harmon, Frank Linton, and Bill Hesbach.</td>
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<tr>
<td><strong>ON THURSDAY, 8/16</strong>, from 12noon to 12:30, the authors at the signing table will be Kirsten Traynor, Cindy Bee and Wyatt Mangum.</td>
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<tr>
<td><strong>ON FRIDAY, 8/17</strong>, from 12 noon to 12:30, the authors at the signing table will be Dewey Caron, Kim Flottum, and Celia Davis.</td>
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Cindy Bee
*Honey Bee Removal, A Step by Step Guide*

Dewey Caron
*Honey Bee Biology and Beekeeping, Observation Hives, Africanized Honey Bees & Guide to Honey Bee Maladies and Beekeeping Basics (with Maryann Frazier Field)*

Celia Davis
(Book available at the Bee Craft booth only)
*The Honey Bee Inside Out, The Honey Bee Around and About*

Kim Flottum
(You can also catch Kim at the Bee Culture vendor booth)
*The Backyard Beekeeper, Better Beekeeping, Honey Connoisseur (with Marina Marchese) & The Business of Bees*

Ann Harman
(You can also catch Ann at the Bee Craft booth)
*Kitchen Creations with Honey, Major Flowers Important to Honey Bees in the Northeast and Mid Atlantic States (with Diana Sammatarro)*

William Bill Hesbach
(Bill will have some of his books with him)
*An Introduction to Splitting Hives as a Part of Varroa Control*

Frank Linton
*The Observation Hive Handbook*

Wyatt Mangum
(You can also catch Wyatt at his vendor table)
*Top Bar Hive Beekeeping*

Kirsten Traynor
(This busy bee might be found hanging out at the Dadant/ABJ booth)
*Two Million Blossoms: Discovering the Medicinal Benefits of Honey, Simple, Smart Beekeeping*
Chief Lockamy of the Nansmond Indian Nation Opens the EAS Conference Wed. Aug. 15th at 8:15

Wednesday, August 15 at 8:15am

EAS 2018 welcomes Chief Lockamy of the Nansemond Indian Nation to open the conference Wednesday morning with a brief opening blessing. It is commonplace in Tribal communities to open events by acknowledging the traditional Indigenous inhabitants of the land. The Nansemond, are the indigenous people of the Nansemond River, a 20-mile long tributary of the James River in Virginia. The tribe was part of the Tsenacomoco (or Powhatan paramount chiefdom) which was a coalition of approximately 30 Algonquian Indian tribes distributed throughout the northern, southern, and western lands surrounding the Chesapeake Bay. The name “Nansemond” in fact means “fishing point.” The tribe applied for and received Virginia state recognition in 1985 and after more than 30 years of effort the tribe (along with 5 other tribes from the original Powhatan paramount chiefdom) was granted federal recognition. Special thanks to Kim Epperson of the Nansemond Beekeepers Association for her part in bringing Chief Lockamy to EAS 2018.

Children’s Program at EAS

Wednesday, August 15th 10:00am - 11:30am*

The Children’s Program at EAS includes a FREE session titled Honey Bee Science for Kids on Wed. Aug. 15th from 10:00am- 11:30am in room 102/103 organized by Thea Klein-Mayer, Program Coordinator at the Washington Youth Garden. The children's activities are designed for ages 7-12 however older and younger siblings and friends are welcome. During the 90-minute program youth will learn about honey bees, pollination, and honey through play, art, and science activities. Pre-Registration is requested and you can check to see if spaces are still open at bit.ly/beescienceforkids or contact Thea at tkmayer@gmail.com.

Toni Burnham will lead an afternoon workshop about Teaching Bees to Children on Thursday at 4:15pm – 5:15pm in Room 104/105. Toni has a wealth of experience from her vast volunteer work with youth in Washington, DC. She will offer tips and activities for educational sessions in various settings (classroom, non-school meeting, fairs, etc.) including lesson plans and resource lists.

Be Sure to check the Daily Waggle for more EAS children’s activities that might evolve including outreach in the local Hampton community.

Thanks to the Sweet Virginia Foundation for sponsoring the EAS Children’s Program. Check out their FREE Hive Alive Lesson Plans at http://sweetvirginia.org/hive-alive/
OTHER LOCAL ATTRACTIONS AND EVENTS

HAMPTON

HAMPTON SCUTTLE BUS

While visiting Hampton, the most convenient way to get where you want to go is the Hampton Scuttle Bus. The Scuttle Bus route transports visitors from their accommodations to shopping, dining, attractions, recreation and entertainment in Coliseum Central, Downtown, Phoebus, Fort Monroe and Buckroe Beach. Go to VisitHampton.com for the latest route and hours of operation.

Seedling

Denotes African American Heritage Site. Hampton’s rich tapestry of African-American heritage is presented in the Family Tree Heritage Sites Guide available at the Hampton Visitor Center.

HAMPTON VISITOR CENTER

120 Old Hampton Lane • 757-727-1102 • 800-800-2202 • www.visithampton.com

The Hampton Visitor Center is the perfect place to begin your city touring. You will find a variety of maps, area attraction brochures, coupons, upcoming events and knowledgeable Information Specialists ready to answer any questions you
might have. Purchase your Sea to Stars Ticket at the Visitor Center. This combo ticket offers the best value and includes admission to the Hampton History Museum, the Miss Hampton II Harbor Tour, a spin on the Hampton Carousel and the exhibits and IMAX film at the Virginia Air & Space Center. Open year-round: Mon-Sat 9 a.m.-5 p.m. & Sun 1 p.m.-5 p.m. You will find our helpful Visitor Information Specialists at the welcome desk in the Hampton Roads Convention Center. These passionate locals will point you in the right direction for food, shopping and regional fun.

AIR POWER PARK
413 W. Mercury Boulevard
757-726-0650
Learn about the vital role Hampton played in America’s early space exploration and aircraft testing. Conduct your own self-guided tour in the park featuring jet planes, missiles, and rockets. Use the back of the brochure as a guide. Children’s playground area. Open year-round, except for major holidays: daily 8:30 a.m.-4:30 p.m.
Free admission. I-64, exit 263B

BLUEBIRD GAP FARM
60 Pine Chapel Road
757-825-4750
www.hampton.gov/bbgf
Bluebird Gap Farm
Designed to resemble a working farm, this 60-acre site is home to domesticated and wild animals familiar to traditional Virginia farms. Playground for ages 2-12, picnic tables and shelter, grills, antique barn, garden and arboretum, and short walking trail on site. Open daily: 9 a.m.-5 p.m. (November-March), 9 a.m.-6 p.m. Closed all major holidays. Free admission. I-64, exit 263B or I-664, exit 2

BUCKROE BEACH PARK
100 S. First Street
757-727-8311
www.hampton.gov/parks
Enjoy the wide, clean beach and gentle surf of the Chesapeake Bay. Lifeguards on duty during the summer season. Park, picnic shelters, pier, stage and watersports rentals are available. Playground on site. Pets are not allowed. Open year-round; Lifeguards present 10 a.m.-6 p.m. Memorial Day through Labor Day. Free admission. I-64, exit 268, left on Mallory St, right on Pembroke Ave.

CASEMATE MUSEUM AT FORT MONROE
20 Bernard Road
757-788-3391
National Park Service 757-722-FORT (3678)
Fort Monroe’s Casemate Museum
Located on the 565-acre peninsula known as Old Point Comfort, Fort Monroe is the largest stone fort ever built in the United States. The site was an active US Army post from 1823-2011 and is now operated by the Fort Monroe Authority and the National Park Service. Museum exhibits chronicle the history of the site from pre-colonial times to the present.
During the Civil War, Fort Monroe was a Union stronghold and attained the nickname “Freedom’s Fortress” as a shelter for thousands of enslaved freedom seekers. Visitors can also enter the cell where Jefferson Davis was imprisoned and climb atop the fort’s ramparts for views of the surrounding waterways. Other must-see sites in the vicinity of the museum are the Chapel of the Centurion, Quarters No. 1, the Lincoln Gun, and the Old Point Comfort Lighthouse. Open daily 10:30 a.m.-4:30 p.m. Admission is free and self-guided. For a nominal fee, guided group tours are available by reservation. 757-788-3391 opt 1. I-64, exit 268

**FORT WOOL**

Hampton Roads Harbor  
800-800-2202 • 757-727-8311  
[www.hampton.gov/parks](http://www.hampton.gov/parks)

Robert E. Lee directed construction of the fort which was built on a man-made island of stone. Dating to 1819, it played important roles in the Civil War and in both World Wars, bearing witness to the Battle of the Ironclads. The fort was also a favorite escape of President Andrew Jackson. Although not accessible by car, it is featured during the Miss Hampton II harbor tour. Private boats are welcome to dock May through Sep. Mon-Sat 9 a.m.-5 p.m.

**GRANDVIEW NATURE PRESERVE**

[Entrance on State Park Drive](http://www.hampton.gov/parks)  
757-727-8311

Ideal for observing wildlife, kayaking, hiking and fishing, this 578-acre preserve and estuary on the Chesapeake Bay includes 2½ miles of tranquil bay-front beach. Open year-round daily. Free admission. I-64, exit 267 to Woodland Rd. Continue to State Park Drive nearly at end. Turn left on Beach Road. Street Parking.

**THE HAMPTON CAROUSEL**

602 Settlers Landing Road  
757-272-1102

Build in 1920, the carousel is completely restored to its original beauty and housed in its own weather-protected pavilion on the city’s downtown waterfront. It is one of only 70 antique carousels still existing in the US. Open April through Dec. Tues-Sun 10 a.m.-5 p.m. Closed Mon. Rides $1. I-64, exit 267.

**HAMPTON HISTORY MUSEUM**

120 Old Hampton Lane 757-727-1610  
[www.hamptonhistorymuseum.org](http://www.hamptonhistorymuseum.org)

![Hampton History Museum](image)

Discover how Hampton became America’s Gateway, critical to four centuries of national history. Explore the chronicle of life in America through the story of this city by the sea, from early Native American culture to man’s reach into space. Ten remarkable galleries share the personal stories of explorers, pirates, and men and women working along the Chesapeake Bay, and illustrate profound changes to our nation. Hampton’s history includes dramatic moments on the world stage including the American Revolution, War of 1812, and the American Civil
War, as well as pivotal events in our culture – such as the “Contraband Decision,” the first step toward freedom for millions of people held in slavery. Open year-round: Mon-Sat 10 a.m.-5 p.m. & Sun 1 p.m.-5 p.m. Closed major holidays. Admission is $5 Adults; $4 Seniors, active military, active NASA, AAA, Children 4-12; Free for ages 4 and under. I-64, exit 267

SANDY BOTTOM NATURE PARK

1255 Big Bethel Road 757-825-4657
www.hampton.gov/parks

Sandy Bottom Nature Park

This 456-acre recreational facility features two lakes, wetlands areas, trails for hiking and biking, fishing, non-motorized boating, picnic areas, children’s playground, a campground, yurts for rent, and a beautiful nature center. Call for special nature programs or tours. Open year-round: daily sunrise-sunset. Nature center hours: May through Sep. 9 a.m.- 6 p.m., Oct. through April 9 a.m.-4:30 p.m. Free admission; fees for rental items. I-64, exit 261A

VIRGINIA AIR & SPACE CENTER/ RIVERSIDE 3D IMAX THEATER

600 Settlers Landing Road 757-727-0900
www.vasc.org

The Virginia Air & Space Center is the official visitor center for NASA Langley Research Center. Visitors can immerse themselves into the heartbeat of the sun or train like an astronaut in the Be the Astronaut exhibit. The Adventures in Flight and Space Quest galleries feature historic artifacts, such as NASA’s Apollo 12 Command Module, and a three billion year old moon rock. With more than 100 hands-on exhibits, your trip is sure to be memorable. Before you leave catch a film in the technologically-advanced Riverside 3D IMAX Theater on a five-story high screen with 16,000 watts of digital-sound. Open year-round. General Admission includes an IMAX educational film: $19 Adults; $15.50 Children/Students (ages 3-18); $17 Seniors (65+); $16 Military/NASA. IMAX Admission only (45min. films) available. Check www.vasc.org for more information and showtimes.

WALKWAY AT CENTRAL PARK

Two portions of a 2.16-mile linear park that will wind through Hampton are now available for visitor enjoyment, offering two distinct experiences.

Hampton guests staying in Coliseum Central accommodations will be located in close proximity to both portions of the trail, but particularly the path that winds its way through the tourism district. The trail, designed for walkers, runners and cyclists, provides easy accessibility to the Hampton Roads Convention Center, Hampton Coliseum, Bluebird Gap Farm and shopping and dining at the Power Plant. If you are one to get out and explore your surroundings, this new addition will be a pathway to those experiences.

At the other end, at Air Power Park, a raised wooden walkway provides a quiet nature observation deck, with views of Newmarket Creek. Visitors may see herons, egrets, redwing blackbirds, and various types of crabs, among other wildlife. The full trail is expected to be complete in spring of 2019.
NEWPORT NEWS

THE MARINERS’ MUSEUM AND PARK
100 Museum Drive, Newport News, VA 23606
757-596-2222
www.marinersmuseum.org

Designated by Congress as America’s National Maritime Museum, The Mariners’ Museum offers a captivating look at centuries of seafaring adventures. The dramatic USS Monitor Center brings to life the “Battle of the Ironclads” and offers visitors the chance to walk the deck of a full-scale Monitor replica. Other treasures await at this maritime gem. The world-class collection includes 35,000 maritime paintings, artifacts, figure heads, ship models, decorative arts and small craft from around the world. Shop for unique souvenirs in The Museum Shop and dine in the café. Special events and evening programs are held year-round. Parking is free. Summer Hours (Memorial Day - Labor Day): 9 a.m. to 5 p.m. daily. Admission: $1 thanks to support this summer from the City of Newport News and Newport News Shipbuilding. 3D “Explorers Theater” admission: $6 general membership; $5 museum members: $2 children 3 and under.
Highway Exit: 258A from I-64

VIRGINIA LIVING MUSEUM
524 J. Clyde Morris Boulevard, Newport News, VA 23601
757-595-1900
www.thevlm.org

Our state’s natural heritage is the star at the Virginia Living Museum. Here, visitors can see red wolves, bald eagles, a loggerhead sea turtle, fish with no eyes and frogs that change colors. Living exhibits depict Virginia’s natural heritage from the mountains to the sea, including a cypress swamp and a mountain cove. An observatory, state-of-the-art digital planetarium theater, outdoors boardwalk, living greenhouse and conservation garden add to the experience. Shop for unique souvenirs in the Wild Things Museum Store and dine in the Wild Side Café. Special events and evening programs are held year-round. Parking is free. Open daily, 9 a.m. to 5 p.m. Extended Summer Hours: Open Thursdays 9 a.m. to 8 p.m. through September 1, 2016. Fees: $20 adults/$15 children (3-12), ages 2 and under FREE. Planetarium $4 additional.
Highway Exit: 258A from I-64

DAY TRIPS

WILLIAMSBURG
www.visitwilliamsburg.com

HISTORY

Experience the story of America in the place where it all began.
Discover what John Smith's Virginia colony was like when you visit Jamestown Settlement. Observe an archeological dig and the original fort at Historic Jamestowne. Feel the excitement of Colonial Williamsburg, where historical interpreters re-create life on the eve of the Revolutionary War. Travel to Yorktown Battlefield, where the United States gained its independence. Then find a new understanding of our nation's beginnings at the American Revolution Museum at Yorktown, where you can explore re-creations of a Continental Army encampment and 1780s farm.
THEME PARKS
The freedom to scream your heart out.
Fun for the whole family awaits at Williamsburg's amusement parks. Busch Gardens has thrilling roller coasters, plenty of shopping and dining options, and shows for the whole family -- all throughout elaborately themed lands. At Water Country USA, Virginia's largest water park, relax in the free-floating river, cool off in the wave pool or brave one of the park's mega slides.

VIRGINIA BEACH
www.visitvirginiabeach.com

OCEANFRONT
As the hub of hotels, dining and entertainment in Virginia Beach, the Oceanfront is where the action is. Live music, street performers, outdoor cafes, hot dog and snow cone vendors, the popular Rudee Inlet marina district, and our famous three-mile boardwalk, perfect for rollerblading, jogging or cruising down the strip on a fat tire bike. Sunbathers come for the wide, sandy beaches. Surfers come for the waves. And everyone comes for the unforgettable experience of a classic day at the beach.

VIRGINIA AQUARIUM
717 General Booth Blvd, Virginia Beach, VA 23451
757-385-3474
www.virginiaaquarium.com
Whether you're an avid marine lover or just enjoy exploring, there's something for everyone at the Virginia Aquarium & Marine Science Center. Come by and explore over 800,000 gallons of one of the best aquariums in the country. From hundreds of hands-on exhibits to their National Geographic 3D Theater, it's hard to fit all that the Virginia Aquarium has to offer into just one trip. The Aquarium is open daily from 9 a.m. to 5 p.m. Admission: $24.95. Movie and boat trip extra. Children under 2 are free.

CAPE HENRY LIGHT HOUSE
583 Atlantic Ave, Fort Story, VA 23459
757-422-9421
There are two lighthouses located at Cape Henry within Fort Story military base near the northern end of Virginia Beach. While the original Cape Henry Lighthouse is the 4th oldest lighthouse in the country, it was the first lighthouse authorized by the U.S. government, dating from 1792. In fact, it was the first federal construction project authorized by President George Washington after the Revolutionary War. In 1881, a newer lighthouse was constructed 350 feet from the original. The original and newer lighthouses were each placed on the National Register of Historic Places in 1966 and 2002, respectively. The original lighthouse is open to the public and an unimpeded coastal view can be enjoyed from the 360-degree lantern room. Open daily 10:00 a.m. - 5:00 p.m. Admission: $10. Children 6 and under are free. All climbers must be 42 inches tall.
Virginia Honey Bee Festival

Saturday, August 18th

How are you going to celebrate World Honey Bee Day on Saturday, August 18th, the day after EAS 2018? Consider visiting the Virginia Honey Bee Festival™, an annual event held from 10 AM to 4 PM at the Norfolk Botanical Garden, immediately adjacent to Norfolk International Airport. Thanks to a staff of gardeners keeping 7000 species of plants in bloom, Norfolk Botanical Garden is the ultimate 155 acres of bee forage!

Festivities are centered indoors at Baker Visitors Center with an assortment of educational displays including an 8-frame observation hive and honey extracting demonstration. Local artisans sell their unique one-of-a-kind creations nearby while food truck vendors and musicians enliven the atmosphere outdoors where children’s activities take place along with a pollinator-friendly plant sale.

Plan to extend your EAS experience and visit the Norfolk Botanical Garden as they celebrate the hardworking honey bee. Admission to the festival is free with a ticket to Norfolk Botanical Garden which includes all the garden has to offer such as tram tours, boat tours, the butterfly house, and a dozens of themed gardens along 12 miles of paved trails. Begun as a WPA project in 1938, the garden is a national historical landmark renowned for its collection of azaleas, camellias, roses and rhododendrons, one of the largest on the East Coast.
Nansemond Indian Pow Wow

Saturday and Sunday, August 18th - 19th

Join the Nansemond Indian Tribe at their 30th Annual Nansemond Summer Pow Wow on Aug. 18-19, right after EAS.

Chief Lockamy invites everyone to join him at the 30th Annual Nansemond Summer Pow Wow on August 18th and 19th at Mattanock Town, 1001 Permbrok Lane, Suffolk, VA 23434.

To learn more about the Nansemond Indian Tribe and Mattanock Town see these links

Nansemond Indian Tribal Association: http://www.nansemond.org/
Mattanock Town: http://www.mattanocktown.org/
Bluebird Gap Farm, Master Gardener Demonstration Beds and Arboretum.

FREE

Open Daily 9:00 am - 6:00 pm.
60 Pine Chapel Rd, Hampton, VA.
https://www.hampton.gov/139/Bluebird-Gap-Farm

Less than a mile from the Hampton Convention Center, Bluebird Gap Farm offers an exciting, family-oriented adventure and educational experience. Master Gardener Demonstration Beds and Arboretum are located at Bluebird Gap Farm. Vegetable and flower beds are maintained by Hampton Master Gardeners and provide inspiration and education to the public as well as beauty and function. Master Gardeners work in the Arboretum year-round and are there to answer your gardening questions. The 60-acre farm also has around 150 domestic and wild animals including horses, cows, pigs, goats, and chickens. There are also birds of prey, whitetail deer, llamas, alpacas, tortoises, peacocks, rabbits, and waterfowl. Picnic tables and grills are placed throughout the farm. An antique display barn features a variety of both home and farm antique pieces from various time periods over the last couple of centuries. Snack and drink vending machines are also located in the antique barn. Animal feed machines are located in several locations for those wanting a more 'interactive' experience (don't forget your quarters!).
COMING UP NEXT YEAR...

We invite you to Greenville, SC in 2019 to Celebrate the occasion of the of the first Conference of the Eastern Apicultural Society to be hosted by South Carolina! The Hilton of Greenville, SC will be the location of choice on July 15-19, 2019. The City of Greenville, the State of South Carolina and the Beekeepers of South Carolina are anxiously awaiting your arrival.

With the exception of tours, all of the activities will be held in one location and under one roof. For those that have attended some of the past Conferences, this will be a pleasant change. Greenville, SC is located in the Piedmont Section at the foot of the mountains. We are conveniently located 3 hours south of the North Carolina Mountains and 4 hours north of the South Carolina Coast. Conveniently located close to GSP our International Airport, Am Track Station, or Bus.

Our Theme will be HONEY BEE HEALTH, and we are pleased to advise that we will be covering most of the many topics involved with keeping our bees safe and prosperous. Education will be the focal point in the Short Courses with beekeepers being trained in reading the frames and identifying and selection of the appropriate action to take to remedy every problem normally found in the bee yard. We will have Keynote Speakers each morning of the Conference giving us the up to dated information on the latest research taking place, short courses taught by experienced beekeepers, to include a level for beginners, intermediate and more advanced beekeeping tracks, and workshops each afternoon of the conference. A fully operative Bee Yard will be located on the premises for education and testing for the Master Beekeeper Exam.

On Thursday evening we will have an auction event, and on Friday night we will have our Banquet. The Tours Committee is busy at work arranging for exciting places to visit. Evenings will be filled with delightful events as well as a time to relax and enjoy the company of the beekeepers in attendance. We are looking forward to Hosting the EAS 2019 for the First Time in South Carolina! See you in July!

Very Best Regards,

Ralph C. (Buddy) May Jr.
EAS VP (2018)
“IF I HAVE SEEN FURTHER THAN OTHER MEN, IT IS BECAUSE I HAVE STOOD ON THE SHOULDERS OF GIANTS”
- Sir Isaac Newton

We take this space to honor a few special individuals to whom we owe a dept of gratitude for their place in Virginia’s history of involvement with the Eastern Apicultural Society (EAS). Their dedication and volunteer service to EAS over the years has led us to this moment in time hosting EAS 2018 in Virginia.

**BILLY DAVIS**
In Memorial. Billy Davis passed away July 17, 2018
Billy Davis is an EAS Master Beekeeper and 2011 EAS Divelbiss award winner in part for his tireless efforts resulting in an educational consortium of beekeeping teachers in Virginia. EAS would not be the same without Billy extolling the virtues of his stress reducing quiet box and use of drapes in the apiary - not to mention his smiling face and Master Beekeeper shirt.

**RICK FELL**
Dr. Fell’s involvement with EAS can be thought of as going back all the way to Cornell University where he assisted in one of the first Master Beekeeper certification tests, the basis for the EAS Master Beekeeper program today. Rick was involved in the 1987 EAS held at Virginia Tech. and led the Short Course that year described as “the biggest and best ever with 74 participants!”

**ANN HARMAN**
Ann has been a tireless worker bee on behalf of the Eastern Apiculture Society both as a Virginian and a Marylander. Ann was one of the first EAS Master Beekeepers, certified in 1981. Ann’s many roles at EAS include serving as EAS 1990 President, EAS 1996 Vice President, Vice Chair, Awards committee lead, honey show chair, speaker and recipient of the Divilbiss award. The Honey Show owes a special thank you to Ann for her service keeping it going.

**PATRICIA HASKELL**
Pat has been a champion of helping educate and prepare beekeepers for the EAS Master Beekeeper certification since she was certified in 2003. Her “old oak table” study group is well known. We are grateful for Pat’s mentorship and leadership in beekeeping education throughout Virginia and for being such a champion of the benefits of attending EAS conferences.

**BRENDA KIESSLING**
Brenda Kiessling has been attending EAS conferences since Virginia last hosted in 1996 and has only missed one conference since then. She was the one of the first people in Virginia who actively promoted attending EAS conferences and actually walked around wearing a sandwich board at the Virginia IN GRATITUDE
by Pam Fisher and Karla Eisen

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State Beekeepers Association meetings! She is an EAS Master Beekeeper and served EAS both as a conference speaker and as the EAS Master Beekeeper Delegate. She currently champions the Youth Scholarship award.

**BOB WELLEMEYER**

Bob is one of those guys who is a quiet force, often working under the radar, but always providing rock solid support to EAS. He and his wife, Beth crafted the beautiful EAS stained glass light box that appears on the stage at EAS conferences. They also designed the beautiful 1996 logo used when EAS was last held in Virginia. Bob was EAS President in 1996, Vice President in 1987, and a State Director. He has taught in the short course and conference and has been a honey show advisor, mentor, and judge for many years.
2½ FALL DAYS IN OCTOBER...
4 SUCCESSFUL COMMERCIAL BEEKEEPERS
AN OPPORTUNITY YOU WILL NEVER GET AGAIN!

Listen as four very different commercial beekeepers share how they spend their year; telling us, in their own words and pictures “MY STORY.” Sit back and relax as each fascinating guest spends ½ a day explaining their operations, where they have been and where they are going.

October 19 - 21, 2018

Bret Adee – With locations in California, South Dakota, Nebraska, Adee Honey Farms is probably the world's biggest beekeeping operation. Adee Honey Farms pollinates primarily almonds in California, but also travel to pollinate cherry and apple trees in Washington and Oregon. On top of that they also produce millions of pounds of honey each year. Follow all those bees for a whole year to see how the biggest makes it work.

John Miller – John owns Miller Honey Farms which is based in Blackfoot ID but also has locations in Gackle, ND and Newcastle, CA. Like many commercial beekeepers, John trucks his bees to several states for pollination but what John does differently from most is he winters his bees in advanced wintering buildings in North Dakota; something which is virtually unheard of in the commercial beekeeping industry. Come listen to how he makes it all come together into a successful operation.

Mike Palmer – Mike specializes in the Sustainable Apiary using production colonies, nucleus colonies and mating nucs. That strategy gives him enough bees to produce Vermont’s prime comb honey and sell queens and nucs to others in the area. He isn’t one of the largest but he is one of the best. Learn the how’s of this northern, non-migratory beekeepers success story.

Ray Olivarez – Carefully chosen locations in Northern California, Montana and Hawaii’s Big Island allow Olivarez Honey Bees to offer customers premium-quality queens and bees year-round. OHB is surely one of the largest package and queen providers in the US with specialty climate controlled trailers that allow them to truck packages across the country. In addition to selling queens and packages, Ray’s team also provides almond pollination and produces honey. To top it all off they offer a retail store to die for and host a large “Hobby Day” every spring. Sure to be a fascinating 4 hours hearing just how they do it the OHB way.

Join us in the conference room at 640 W. Liberty, Medina, OH
Registration begins May 1 and space is limited so don’t wait!

Only $50 per person!

To See Lodging Information And Register Visit www.beeculture.com
Citizen science needs you!
Join in a national citizen science initiative to explore the relationships among our bees, our weather, and hive weight, temperature, and humidity.

Over 10,000 delivered
Thank you to our Citizen Scientists
All data is public domain.

BroodMinder-CS wireless hive monitor $289
EAS Special $259

Hive weight, brood temperature and humidity
Beekeeper/gardener friendly
100% designed and manufactured in Wisconsin

More information at BroodMinder.com & BeeCounted.org