

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

VOLUME 49, NUMBER 1 WINTER 2022



### **Featured Article**

NOTES FROM THE LAB: THE LATEST BEE SCIENCE DISTILLED

### Master Beekeepers

INTERVIEW WITH EAS MASTER BEEKEEPER VINCE ALOYO

### **Honey Bee Health Coalition**

2021 ANNUAL REPORT



## What's Inside

THE EAS JOURNAL, WINTER 2022

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## From the Desk of the President

Beeing Social, Again! EAS 2022: Ithaca, NY August 1-5, 2022 Wow! It is coming together!!

The Site Inspection Committee made a couple more trips to Ithaca College to refresh our memories and resolve questions we had. With each visit we learned much more than we came for and came away totally psyched. This venue will work...This place will be good...THIS VENUE WILL REALLY BE GREAT!!!

A number of great meeting spaces, plus microscopy labs, bee yard, honey show space and the Vendor area to round it out. Five days of total immersion in bees. Can you imagine! Hang with beekeepers from all over.

There is something for everyone –beginner, intermediate, advanced or a mix (like me) of skill levels. It seems there is always something new to learn and this is the place to do it. You will get to sit in on presentations by, and maybe meet, award-winning presenters, researchers and keynote speakers.

One thing for sure is that some of the work done in beekeeping research will blow your mind.

Programming is coming together! Get ready for the Bee Olympics. Hint: start practicing Drone Spitting (um, make sure it IS a Drone) and speed lighting your smoker. A field trip to a commercial beekeeper's operation is planned, including a barbeque and 10,000+ colonies. AKA I only started with 2. Thursday evening's dinner will feature the annual live auction. There will also be a virtual auction leading up to the conference and silent auctions during each day of the conference. Friday night will be the banquet.

Start prepping entries for the Honey Show. The ribbon you win gives you bragging rights!

We will be in the middle of the famous Finger Lakes wine country so that is likely to influence our plans. Plus there are a couple meaderies.

As for accommodations, campus lodging in dorms will be available. These are a cut above the '6 rooms sharing 1 bathroom' set up. Nearby state parks offer camping and a waterfall or two. My favorite is Robert H. Treman State Park with one of the best swimming holes around, beneath a waterfall.

We will also have group rate pricing in nearby hotels.

If you are planning to drive, you are in for a scenic trip no matter which direction you come from.

If flying, Ithaca Tompkins International Airport serves as a major international and national gateway to Cornell, Ithaca College, TC3 and other major employers. A \$25 million expansion was completed 2 years ago, expanding the terminal by over 50% and including a new U.S. Customs Facility.

If your friends and family think you are nuts for wanting to hang out with thousands of stinging insects, this is the place for you! Mark your calendar. EAS 2022: Ithaca, NY August 1-5, 2022. Beeing Social, Again!

See you there.

Bob Talkiewicz, EAS President

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It is with great pleasure that we are able to introduce a renewed format for the EAS website: https://easternapiculture.org

A "Tech Committee" has worked long and hard to make the site more efficient, navigable, and visually pleasing. We encourage you to visit the site and browse the various tabs including conference, programs, resources, membership and so much more. Your comments, thoughts and suggestions may be forwarded to the Secretary listed under EAS Contacts – EAS Executive and will be most welcome, be they regarding current content or content that you would like to see in the future.



# HONEY BEE HEALTH COALITION

## **2021 Annual Report**

Submitted by Tammy Horn Potter, KY State Apiarist, Kentucky Department of Agriculture



The Honey Bee Health Coalition (www.honeybeehealthcoalition.org) brings together beekeepers, growers, researchers, government agencies, agribusinesses, conservation groups, manufacturers, and consumer brands to improve the health of honey bees. See members list in Appendix A.

Our mission is to collaboratively implement solutions that will help to achieve a healthy population of honey bees and other pollinators in the context of productive agricultural systems and thriving ecosystems.

#### What we do

We create integrated, collaborative approaches to honey bee and pollinator health in agricultural systems:

- We connect diverse sectors and stakeholders on key bee health science, practice, and policy issues
- We develop, distribute and demonstrate tools, resources and best practices for growers, beekeepers, and agricultural stakeholders
- · We catalyze collaboration and commitments toward positive changes for bees

#### Issues we prioritize

We focus on the multiple and interrelated stressors on honey bee health:

- We need testing, treatment and new tools for combatting pests and disease, including varroa
- We need approaches that control crop pests while safeguarding bee health

We need more and better habitat for honey bees and all pollinators

#### 2021

The Honey Bee Health Coalition had a very busy year as we continued to develop new tools and resources for beekeepers, farmers and agriculture stakeholders and conducted outreach with existing resources. Initiatives were completed in all priority areas of forage and nutrition, hive management, crop pest control and outreach and education. As a snapshot, we:

- Finished off a year+ long effort to develop a commercial varroa management guide with 6 case studies
- Developed draft Apple Best Management Practices (BMPs) for pollinator health with the U.S. Apple Association
- Continued facilitating the Varroacide Resistance and Testing with 7 labs in 3 countries to find the next varroacide
- Wrapped the North Dakota Bee Integrated pilot and produced 30 Bee Integrated videos detailing case studies of growers and beekeepers working together to implement bee health practices in Oregon, Michigan and Iowa.
- Made progress toward the ribbon-cutting for Bianca's Pollinator Pathway at the Center for Maryland Agriculture and Farm Park.
- Held 4 cross sector dialogues to build deeper Coalition understanding of important science and policy issues related to our focus areas, identifying areas for collaborative action based on this exploratory effort.

Had ~115,000 website views and developed a new website to be launched December 2021

These efforts and more, along with outreach and media metrics, are described below, followed by a snapshot of initiatives to be completed in 2022.

#### **Cross Sector Dialogue Series:**

These dialogues are developed by Coalition members who jointly interviewed experts and then designed the half-day sessions for all Coalition members. The purpose was to take a deeper dive into important topics to grow our understanding and also to identify opportunities for future action. The 2021 series identified initiatives that the Coalition can undertake in 2022 and beyond. The following four dialogues occurred in 2021.

- Forage & Nutrition: Habitat Design, Seasonality, Climate Change
- · Hive Management: Integrated Pest and Disease Management
- Crop Pest Control: Crop Pesticide Management and Best Practices
- · Cross-Cutting: Farm Bill and Federal Programs

#### **HIVE MANAGMENT:**

*Goal:* Put the best available tools, techniques, and technologies in the hands of beekeepers so they can best manage their hives.

Guide to Varroa Mite Controls for Commercial Beekeeping Operations: The guide highlights case studies of commercial beekeepers and their on-label varroa treatment approaches. The guide was released during Pollinator Week in June and was promoted, with hard copies distributed, at the American Honey Producers Association (AHPA) meeting in December. In addition to social media and a newsletter blast, the Guide was featured in all major beekeeping media, as well as American Beekeeping Federation (ABF) and AHPA quarterlies. Please find the Commercial Varroa Guide at this link. Please find an interview on the Commercial Varroa Guide's development on Two Bees and a Podcast linked here.

#### Varroacide Resistance and Testing Team (VRTT)

The VRTT consists of 12 researchers from 7 labs in 3 countries working on testing orphan compounds to find an effective miticide to kill varroa mites. The cross-sector team with government, academic, and the private sector, has been working for 6 years testing dozens of compounds in the lab and in the field. The research was funded for the last 3 years through a Foundation for Food and Agriculture Research (FFAR grant). In 2021 labs continued to test new potential varroacides and refine the formulations of promising varroacides. The Coalition is also working with USDA ARS researchers to identify commercial beekeepers to participate in an Amitraz resistance trial. We are hoping to find additional funding in 2022.

#### **FORAGE & NUTRITION**

Goal: Promote on-farm practices and policies to increase access to a varied and nutritious pollinator diet.

**Bee Integrated Demonstration Project:** This initiative's goal is to demonstrate how honey bee health can be improved by using a portfolio of tools together in the same agricultural landscape to address the primary risk factors affecting bee health. This began in 2017 in North Dakota with the pairing of 6 beekeepers with 6 growers to implement practices in crop pest control, hive management and the planting of supplemental forage. Control fields and apiaries were established and data was collected on the practices to determine their efficacy. A final report on the North Dakota pilot will be released in January of 2022.

In 2021, The Bee Integrated program expanded its demonstration network to link beekeepers and farmers in lowa, Michigan and Oregon. Video shoots occurred during summer 2021 in order to develop case studies of growers and beekeepers working together to protect bees in specialty and row crops. The video case studies, accompanied by a



print and social media campaign, will be used to promote best practices and integrated, collaborative approaches among beekeepers, growers and other partners.. Links to the videos can be found in Appendix B below. below. Please consider these embargoed until a social media toolkit can be developed for member and partner use.

#### **CROP PEST CONTROL**

*Goal:* Promote on-farm practices and policies to enhance pollinator stewardship and to control crop pests while safeguarding bee health.

**Apple BMPs:** Best Management Practice recommendations for pollinator health in apple orchards were developed in 2021 in partnership with the U.S. Apple Association and the Northwest Horticultural Council. Similar to the Coalition's soy, corn, and canola BMPs, these recommendations identify times during the production cycle that bees may be in harms way and the mitigating activities that the grower can undertake. They also include recommendations related to planting of supplemental forage adjacent to orchards. We are aiming to have the new BMPs completed by January 2022.

#### FEDERAL GOVERNMENT OUTREACH AND SUPPORT

#### **Executive branch outreach**

As we do with all new Executive Branch administrations, the Coalition organized a sign-on letter to the Biden Administration appointees for the U. S. Department of Agriculture, Environmental Protection Agency, and Department

of the Interior. The letter stresses the need to continue efforts to implement a coordinated national strategy to promote the health of honey bees and other pollinators; integrate pollinator health into climate change strategies; continue to support scientific research; increase acreage of high quality, cost-effective private land conservation programs; and, support the creation, demonstration and adoption of pollinator stewardship practices,

The letter resulted in a meeting with Robert Bonnie, Deputy Chief of Staff for Policy and Senior Advisor on Climate in the USDA's Office of the Secretary, as well as a meeting with Michal Ilana Freedhoff, the Assistant Administrator for the Office of Chemical Safety and Pollution Prevention at the EPA.

#### Keystone facilitation of USDA/EPA workshops

Keystone Policy Center, the third party facilitator of the Honey Bee Health Coalition, was independently contracted by USDA to facilitate three workshops in 2021, two convened by USDA and one co-convened by USDA and EPA. These workshops brought hundreds of researchers and stakeholders (including many Coalition members) together to work on issues related to bee health:

- USDA Grand Challenge Workshop: Climate Change & Pollinator Health (May 2021)
- SCINet Workshop: Leveraging advances in data science to manage and conserve pollinators (August 2021)
- USDA/EPA Pollinators State of the Science Workshop (September 2021)

#### **OUTREACH & EDUCATION**

*Goal:* Develop outreach materials; work with media outlets, maintain a high quality website, participate in outreach events, and look for opportunities to raise awareness and education of bee health issues.

**Bianca's Bees:** This effort is being developed based on the generous donations we have received in honor of Bianca, a young girl who passed away suddenly last year. We are creating opportunities to support children in learning about bees and pollinators. We are continuing to meet with our planning team in Maryland to develop a pollinator trail at the 100-acre Center for Maryland Agriculture and Farm Park. This trail will have walking loops that meander through an extensive pollinator garden, crop lands, grass lands, clover pastures, orchards, and vegetable plots and include signage geared to children that teach the importance of managed and native bees across ag and natural landscapes. The park houses 16 demonstration hives and will include a memorial Adventure playground and area in memory of Bianca. This will also be accompanied by a section of our new website that houses a clearing house of educational curricula on bees and other pollinators. Ribbon cutting on the facility is expected in January 2022 with Bianca's classmates being the first field trip.

**Website:** In 2021 the HBHC website received 114,887 page views, an approximate 15% increase over 2020. Although successful in terms of visitors, our website, launched in 2014, had become difficult to navigate for our users due to the sheer amount of resources that the Coalition has developed in 7 years. Keystone decided to build a new site that has an updated look and feel as well as improved navigation. The website will be released in December 2021 and the beta site can be found at this link.

**Pollinator Week:** The Coalition was active on social media during Pollinator Week in June, promoting the importance of bees and resources for beekeepers and farmers. We sent out a social media toolkit for our members to use, released the Commercial Varroa Guide referenced above, and also released this podcast on the Coalition. Check it out at this link.

#### Print and online media

- Over the course of 2021, Bee Culture Magazine printed a 4-part series on the Coalition
- Iowa Farmer Today, Helpful insects bring crop benefits, beauty (link)
- Market Screener, The 'Burbs and Bees: Why It's Important to Invest in the Bee Population (link)
- · ABC News (national): National Honey Bee Day: These foods could disappear if pollinator populations con-

tinue to dwindle (link)

#### **Podcasts**

#### 4-part series on the HBHC on the Beekeeping Today podcast.

- Matt Mulica (The Honey Bee Health Coalition with Matt Mulica (S3, E44) | Beekeeping Today Podcast)
- Dewey Caron (Honey Bee Health Coalition: Part 2 Pests and Predators (S4, E4) | Beekeeping Today Podcast)
- Pete Berthelsen (HBHC Part 3 Pete Berthelsen, Habitat & Forage (S4, E13) | Beekeeping Today Podcast)
- Caydee Savinelli Pesticides and bee health (yet to be released)

#### **Keystone Policy Center's KEYNOTES podcast**

Honey Bee Health Coalition (buzzsprout.com)

#### Bee Club presentations

Ohio State Beekeepers Association (January 2021) Vermont Beekeepers Association (March 2021) Colorado Mile Hive Bee Club (October 2021)

#### In-person meeting (note this was limited in 2021 due to Covid)

Presented at the American Honey Producers Association meeting, Baton Rouge, LA, December 2021

#### **Coalition Newsletter**

The Coalition sends out quarterly newsletters and has 6,104 subscribers to our MailChimp list. These subscribers signed up for the newsletter by visiting our website and self-subscribing.

#### 2021 Social media data

Facebook:

- We created and amplified 47 unique posts on Facebook thus far in 2021.
- We have a Facebook following of 5,100 users

#### Twitter:

- 10,676 impressions in 2021
- 54 followers added (794 total followers).

#### You Tube:

- · 269,112 views
- · 3,428 hours watch time
- · 1008 subscribers added in 2021
- 4,649 total subscribers

#### Support for the development of Bee Health Coalitions in Colombia and Mexico

Working with the Andean division of Syngenta, Keystone and the U.S. Canola Council participated in 2 recorded zoom interviews on the origins of the Coalition, the process that was used to form, lessons learned, benefits, etc. These were translated and shown at gatherings in Columbia and Mexico to stakeholders interested in developing coalitions similar to the HBHC.

See this link for a video of the interview.

#### **NEW INITIATIVES FOR 2022**

**Hot topics:** External-facing, short, recorded webinars for beekeepers and growers. Work in conjunction with beekeeping associations, USDA and others to develop and amplify.

**Outreach and dissemination of 8th edition of the Tools for Varroa Management Guide:** Complete major revision of the Varroa Guide, finalize revisions and amplify

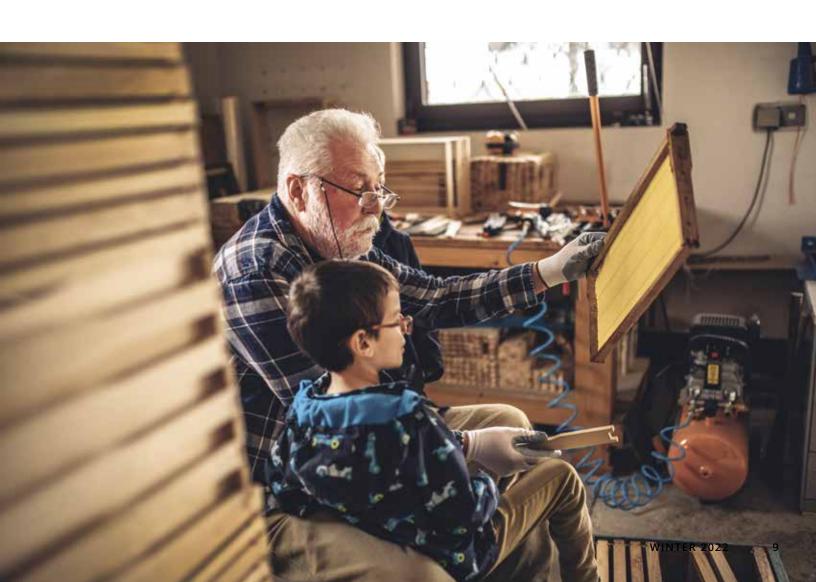
**Identify an interested crop association and produce a BMP for a new crop:** Depends on producer association interest. Possibly blueberries, sunflowers, cherries or another crop.

**NRCS and FSA state level outreach:** Develop communications collateral for local NRCS offices to provide extension agents with information on federal conservation programs that benefit pollinators. Highlight programs that have multiple landowner benefits.

**Launch pollinator habitat in large-scale solar arrays:** Including partnering with organizations already working in this space and determining how best to add value. Could include webinars, videos, or development of a BMP guide.

#### 2022 Coalition meetings/webinars:

Exhibiting and presentation at the American Beekeeping Federation las Vegas, NV, January 2022 Exhibiting at Commodity Classic, New Orleans, LA March 2022 In-person spring Coalition meeting, Traverse City, MI, May/June 2022 In-person fall Coalition meeting, September/October, location TBD



#### APPENDIX A: HONEY BEE HEALTH COALITION **MEMBERS LIST**

Ag Retailers Association

Alberta Beekeepers Commission

American Beekeeping Federation

American Honey Producers Association

American Seed Trade Association

Apiary Inspectors of America

**BASF** 

Bayer CropScience

Bee and Butterfly Habitat Fund

Bee Culture Magazine

Browning Honey Co.

Canadian Association of Professional Apiculturists

Canadian Honey Council

Canola Council of Canada

Conservation Technology Information Center

Corteva Agriscience

CropLife America

Eastern Apicultural Society

Eastern Missouri Beekeepers Association

FieldWatch

Florida Fruit & Vegetable Association

Foundation for the Preservation of Honey Bees

Heartland Apicultural Society

Hive Tracks

Michigan State University Extension

Mitsui Chemicals Agro

National Assoc. of State Depts of Agriculture

National Association of Wheat Growers

National Corn Growers Association

National Honey Board

National Pesticide Safety Education Center

PepsiCo

Pheasants Forever and Quail Forever

Project Apis m.

Propolis Projects/ Levin Family Foundation

Saint Louis Zoo WildCare Institute Center for Native

Pollinator Conservation (CNPC)

Syngenta

U.S. Apple Association

United Soybean Board

University of Maryland

US Canola Association

Veto-pharma

Western Apicultural Society

#### Ex Officio Members

U.S. Environmental Protection Agency

USDA - Office of the Chief Scientist

USDA - Agricultural Research Service

USGS, Northern Prairie Wildlife Research Center

Canada Bee Health Roundtable

#### APPENDIX B: BEE INTEGRATED **DEMONSTRATION CASE STUDIES.**

#### Iowa

Iowa Intro — https://youtu.be/7280YKuIEJI

Creating Habitat — https://youtu.be/1UVSX2AGzFw

Pollinator Pesticide Safety — https://youtu.be/

sATRSIk4tUM

Successful Establishment — https://youtu.be/

MCmX4ZIEO8s

Corteva Grows — https://youtu.be/2YL\_2QAlo8A

Meet Jamie Beyer and Linn Wilbur — https://youtu.be/

ta-SA 9Xpu8



Meet Dick Sloan — https://youtu.be/uvjyl1s-h4s
Meet Keri Carstens — https://youtu.be/6w8f3Rt3Jrw
Meet Rachel Woods — https://youtu.be/6KWqw0OXJnI
Meet Tim Younguist — https://youtu.be/4KHPJIDX8c8
Meet Steve Bradbury — https://youtu.be/P8af5vPl0jM
Meet Bill Dunbar — https://youtu.be/YABRhnzrhFl

#### Oregon

Oregon Intro — https://youtu.be/Wt7A6eWJ-pM Establishing Habitat — https://youtu.be/QXFg-haRSiQ Value of Habitat — https://youtu.be/k8OyZ74C7I0 Protecting from Pesticides — https://youtu.be/ t1dVpud8U7U

Understanding Each Other's' Business — https://youtu. be/Fi7loGln2f4

Meet George Kaufman— https://youtu.be/WMK0V\_ M3WcE

Meet Andony Melathopoulos— https://youtu.be/ E1Akf5tGB6U

Meet Dirk Olsen and TJ Hafner— https://youtu.be/ Drz6pzID4iU

#### Michigan

Michigan Intro (edited since last sent)— https://youtu.be/cKCv646Vi0s

Establishing Forage (previously emailed)— https://youtu.be/kCt6-0JI5Og

Pesticide Safety (previously emailed)— https://youtu. be/lcsWx9iqTrQ

Better Pollination (previously seen)— https://youtu. be/2XHNZMOZLko

Boosting Blossoms (previously seen)— https://youtu. be/FoqKLAkBwAw

Meet Ana Heck — https://youtu.be/SM28LhkpQrQ Meet Dan Wyns — https://youtu.be/gnqg\_x2NyD0 Meet Jamie Ostrowski and Matt Jansen — https:// youtu.be/X7riCf\_HMN4

Meet Mike Van Agtmael — https://youtu.be/a\_pQTRR6xb4

Meet Jim Hilton — https://youtu.be/JkEJqEOJTc4





# **AWARDS AND GRANTS**

## **Call for Nominations**

for the EAS James I. Hambleton Memorial Award; Roger A. Morse Outstanding Teaching/ Extension Service/Regulatory Award; and Student Apiculture Award

by Lou Naylor, Chairman

The **James I Hambleton Memorial Award** was established by the Eastern Apicultural Society of North America to recognize research excellence in apiculture.

The **EAS Student Apiculture Award** was established to recognize students studying apiculture at the undergraduate or graduate level in a recognized college or university in the United States or Canada.

The two reserach award nominations above must include a biographical sketch of the nominee, a list of his/her publications, specific identification of the research work on which the nomination is based, and an evaluation and appraisal of the accomplishment of the nominee, especially of work in the last five-year period for Hambleton Award nominees (or a shorter period for Student nominees). A minimum of one letter of recommendation, in addition to the nomination letter, in support of the nomination are also required; additional support letters are welcome.

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. Nominations for this award are welcome from any person in the field of apiculture. Self-nominations are acceptable. Nominations shall consist of a letter documenting the achievement of excellence in any or all the areas of teaching/extension and/or regulatory activities in apiculture. Some indication of the appointment responsibilities should be included. In addition, a suitable CV or resume documenting the activities of the nominee must be submitted.

**Nominations are now being accepted for all three awards.** The awards for 2022 will be presented at the annual conference of the Society at *Ithaca, New York, August 1-5, 2022.* 

Nominations and letters of recommendation should be emailed to Awardnomination@easternapiculture.org and received no later than February 1, 2022.

Resubmissions from a previous year should be updated if necessary, and a new cover letter should be attached which should indicate that this is a resubmission and relevant data is already in EAS possession.

**WINTER 2022** 

# Call for Proposals

### 2022 EAS Foundation for Honey Bee Research

by Lou Naylor, Chairman

The EAS Foundation for Honey Bee Research is a competitive grant program developed from donations received from beekeepers and others interested in funding research on topical problems in honey bees.

Proposals are solicited annually with award amounts to be determined the spring before the EAS annual meeting. Requests for "seed money" to provide investigators the opportunity to collect preliminary data or as "add on" funds to combine with other funding sources to continue present research will also be considered. Requests for support for student projects (undergraduate summer employees/ graduate student) or for equipment/ supplies for distinct research projects are given highest priority. We welcome separate discrete project proposals and requests that identify pieces of ongoing research programs where additional funds can accomplish an objective of a larger program. Grant funds may be used for supplies, equipment, salaries, travel necessary for data collection or other research tasks, or other appropriate uses by the recipient. As a nonprofit organization, the EAS Foundation does not pay overhead on funded research grants.

The total amount to be awarded in 2022 is \$10,000. The awards will be announced at the EAS 2022 Conference in August 2022, but available by April 1, 2022. The principle investigator may be invited to present their findings at the 2023 EAS Annual Conference; travel and lodging costs associated with presenting will be covered by EAS; and we will publicize the award to aid in solicitation of additional funds for subsequent years. An article for the EAS Journal summarizing the research and results must be submitted by September 1 2023.

Deadline for application is February 1, 2022. Additional submission details can be found at www.easternapiculture.org/honey-bee-research, and further inquiries can be directed to HoneyBeeResearch@easternapiculture.org.

#### **Proposal Submission Criteria**

- 1. Proposals are welcome from any individuals conducting research on honey bees. The role the investigator will perform if awarded the funds should be clearly stated.
- 2. Proposal should briefly outline the objective and a plan of work, to be completed within one year of funding, and a justification for the proposed work. If intended as "seed money," the proposal should clearly state how the funds will enable the investigator to secure additional funding for project continuation. Proposals should not exceed five written pages in total length (double-spaced) excluding title page, budget, and résumé. Only electronic submissions will be accepted.
- 3. Proposal must indicate how results will be disseminated if grant is funded. Investigators must present their work through the EAS journal (in summary form) and to a future EAS annual meeting, if possible, but other funds should be used for this. An acknowledgment of EAS support should be included in any presentations or publications resulting from the research.
- 4. The proposal should be arranged in the following format:
  - a. cover page to include title, name, address, e-mail, and telephone of investigators(s) and title/ affiliation of investigator
  - b. justification
  - c. objective(s)

- d. project description
- e. plan of work/timetable
- f. budget
- g. short (half page) résumé of each participant
- h. name of principal investigator to appear on every page of proposal (very important)
- 5. Electronic copy of the proposal should be submitted by February 1, 2022 to the email account, HoneyBeeResearch@easternapiculture.org

#### **Proposal Review Process**

EAS will review each proposal with a three-person proposal review board. One person is a member of the Board of Directors while the remaining two are researchers (the Board member may be a researcher). None of the panel will have a direct connection to any research project for which a proposal has been submitted. In cases of conflict that panel member will be excused from voting.

Evaluation of proposals will be made on the following criteria: scientific merit, relevance of the proposed project to beekeeping, reasonableness of the budget proposal to the actual work to be performed, potential for securing or adding to funding from other sources, and finally, interest of proposed research to EAS members. All funds must be expended during the year of the grant and an accounting of expenditures made available to the EAS treasurer by the end of the year of the grant.



# MASTER BEEKEEPERS

# **EAS Master Beekeeper Vince Aloyo Honored in Pennsylvania**

by Jim Bobb

The author, Jim Bobb, is a past chairman and past president of EAS. He provides many beekeepers in the greater southeast Pennsylvania area with nucs, packages, and queens. If you look closely, you can often catch a glimpse of Jim at many bee-related meetings around the nation and world.

At the November 2021 PA State Beekeepers Association Conference, Vincent Aloyo was honored as PA Beekeeper of the Year.

Vince Aloyo has been a long-time supporter of EAS. He served many years as EAS Director and is an active EAS Master Beekeeper.

Vince achieved his undergraduate degree in Biology and Chemistry at Cornell University and Ph.D. at University of Tennessee at Memphis. He is currently an adjunct professor at Delaware Valley University and Drexel University. He has served as bee inspector in Pennsylvania, New York, Tennessee, Kentucky, Maryland, and the Netherlands.

In addition to his educational experience, Vince has been a friend to beekeepers, helping, teaching, and demonstrating his knowledge and skills with beekeepers. He is a great friend to this author, and when they meet, this author always learns something new.

Vince agreed to an interview. Let's join the interview, already in progress...

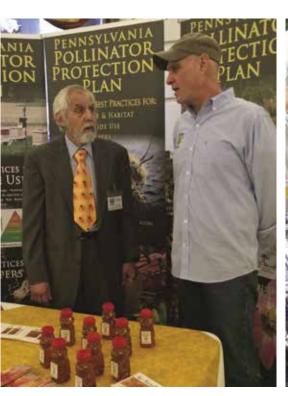
#### JIM: So how did you get started working with bees?

VINCE: Well, I'm a reluctant beekeeper. I started because I was an undergraduate at Cornell and I was a biology chemistry major. And both biology and chemistry have a lot of labs. There's only so many afternoons in the week when I could accommodate a lab and there's a minimum number of credits, so I was looking for something without a lab. Upperclassmen said to take beekeeping and I told them some unrepeatable things, that I wasn't interested in bees, they sting, and I didn't want anything to do with them.

The upperclassman replied, "So yeah, you know, Doctor Morse. He's really funny. It's an easy course. You'll like it." The course fit my schedule, so I said, "OK, I'll take the damn thing."

It was fun. Roger Morse was a good teacher, very funny, all kinds of jokes and snide remarks. But what really suckered us in, for me at least, part of the apiary was right on the edge of the ag campus at that time, kind of just behind some pine trees. Doctor Morse announced one day in the spring, that he got packages of bees. He said, "I'm gonna install them at lunchtime. If you want to see what I'm doing, come on over."

Yeah, so several of us went over. We stood as far away as we could get, and he dumped the bees into the boxes and closed them up. That took ten minutes or so and it was fine.





About three weeks later, he said, "I've got to check to see what those packages are doing. If you want to come over at noon, you can watch what I'm doing."

So we went over. We were as far away as we could get again. He opened the hive and pulls out a frame and says, "Oh, they're doing great. Look at all this comb that they built. Oh, here's the queen."

So of course, we couldn't see a damn thing. We got a little bit closer and he wasn't wearing a veil. He handed the frames to us and we looked, saw the queen there, etc. and he wrapped the whole thing back up. When he finished, I said, "Holy Cow. We did all that and we didn't get stung."

At the end of the semester, I went home, bought a hive of bees and, of course, when I took them home, I got stung a lot. Anyway, I kept going, so I kind of got suckered into it.

JIM: Show someone the queen and their fear of bees goes away.

VINCE: It's kind of like magic.

JIM: Do you have any stories like the largest swarm or highest swarm? What's the best bee story you have?

VINCE: OK, so the one I like to tell is that I did my postdoc in the Netherlands and I wanted some bees. I

joined the local bee club. It was all in Dutch, of course. I don't understand any Dutch, but there was one friendly guy who spoke English and he said he could sell me a hive of bees.

Right across the street from our building was the University Botanical Garden. And. I went over there and they said, "Oh, we'd love to have a hive of bees in the garden and the guys showed me where and gave me a key to the garden so I could go there on weekends.

I didn't have a car. So, I talked to this guy again and he said to just strap it onto the back of my bicycle. It was only a few miles, but the whole way back I was nervous. It was just one deep box. I went very slowly and very carefully all the way to the Botanical Garden. Nothing happened, but it had a lot of potential for problems.

JIM: I always like situations like that and wonder if somebody will stop you and ask things like: do you know you have loose bees completely filling the inside of your cab or do you know there is a hive strapped on your bicycle? It has happened to me.

What advice would you give to someone that's just starting beekeeping?

VINCE: So that's a tough one these days because of Varroa. I think there are several things that new beekeepers should know—that keeping these bees is a

lot of work. You really have to take care of your bees, it's not like the old days before Varroa, when bees took care of themselves. And a lot things require paying attention to timing. You can't ignore them. Some things you can put off for a couple of weeks, but other things, you can't. So yeah, I think the main thing is that keeping bees does require a lot of effort to keep your bees alive and healthy.

#### JIM: How has COVID affected you, your bees, and the bee industry?

**VINCE:** So, several things. One of the things that I do is hive-side mentoring. I go to people's hives and work with them so that they can learn. At least at the beginning of COVID, I wasn't doing that.

I teach at the Delaware Valley University and Temple University in Ambler. Temple cancelled my course last year. Delaware Valley University was online. There is theoretical stuff that you can teach online, but then there's also practical stuff where you actually have to get into the hive and see what's going on and maybe get stung a couple of times. I think that the last spring's batch of students got shortchanged.

As for actually keeping bees, most of the bees are not located near other people, so Covid really didn't bother that. It did decrease my honey sales because people really didn't wanna come over. In fact what we did for honey sales and for selling queen cells is set up for self-serve. You come over and pick up your honey

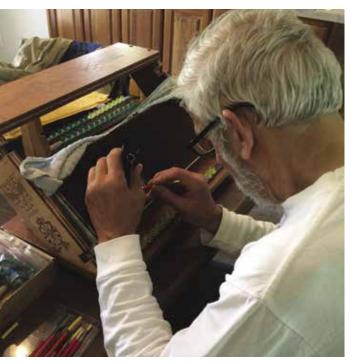
or cells and then drop your money in the box.

#### JIM: So what do you think is the greatest problem to the bee industry right now?

**VINCE:** We both know it's Varroa. There's no two ways about it. I've kept bees long enough that I remember before Varroa and also a couple of years back visited Australia. They don't have Varroa and it is not the same. I mean without Varroa, the bees really take care of themselves. But those days are long gone. I am hoping, within my lifetime, we can create some bees that take care of themselves again, be more like Apis cerana and handle the Varroa.

JIM: Well it took a long time for the Asian honey bee, Apis cerana, to adjust to Varroa, so I don't know if our European honey bees will learn to live with Varroa anytime soon.

**VINCE:** It's gonna be, but hopefully with selective breeding, such as the selection for the low and high Varroa growth project, we seem to be making progress—not in our area where there are beehives all over the place, but in more isolated areas people are starting to have some success keeping bees that have made peace with Varroa, like Tom Seeley and the forest. Of course, that doesn't really apply to honey producing beekeeping. But it shows that it is possible, but not where there's a high density of bees where some people don't wanna take care of their bees.





## JIM: Why did you take the EAS Master Beekeeper exam?

VINCE: I wanted to see if I could do it. You know at that point I had been keeping bees already for forty years. I had thought about it before, but since I was working, I didn't really have time. I thought that once retired, I wanted to do more beekeeping teaching and taking the exam and passing it would kind of increase my credibility in being a teacher, that it was kind of like a stamp of approval. Also. the EAS exam is self-study. And so, when you're ready, you take it. It's a challenging exam. I mean, it's not something you're just going to pass after a year of two of beekeeping. You can't say, "OK, I'm gonna take the exam and pass it." No, it's a challenging exam which I think is a value. I didn't pass it the first time. I missed by a couple of points, so I took it again the next year and successfully passed it.

So, I took it because I wanted the challenge. I wanted to know if what I thought I knew, I did know. You can fool yourself very easily into thinking, "Oh jeez, I know what I'm doing." It's never been the case for me. The bees are always surprising me.

## JIM: How have you benefited from becoming an EAS Master Beekeeper?

VINCE: I think it's really helping with my teaching, not only at the university level but at the club level and I teach all age groups: Girl Scouts, Boy Scouts, and many associations. So the EAS Master Beekeeper Test would assure the audience that this guy understands what he's talking about.

## JIM: Your wife Ellen is also a beekeeper who helps you with the nucs? How do they look this year?

VINCE: We've kind of neglected our business this year. Other things interfered. Ellen's been doing a lot, she really is my helper. I have been keeping bees 55 years, she's been keeping bees 45 years or so. Ellen started volunteering first at the COVID testing Center and then COVID vaccination sites. She had less time to work on the bees, so it was kind of our fault. We've got a pretty good batch of nucs gonna come through the winter. Not as many as we usually do, but it's gonna be OK.

#### JIM: Anything else you'd like to add?

VINCE: Your questions have been good. The last thing I would like to say is that beekeeping can be a lifelong hobby. I mean, I've only been keeping bees 55 years and I hope to continue for another 10 years. Whether you keep a couple of hives or many hives, it can also be a business. For me, it's a side business. I sell some bees, sell some queen cells, and sell a little honey, but I still think of it as a joyous hobby.

I enjoy getting into the bees. I like to see what they're doing. I think it's a worthwhile hobby, and can be a lifetime passion if you appreciate the complexity of the bees. I'm especially enamored with the pheromones.

JIM: Well, in Pennsylvania, you helped a lot of people. You would read the articles and summarize them in plain English. I remember that you did that for us at least 20 years ago when you were active in the Bucks County Beekeepers Association. It was always enjoyable to listen to your talks.

VINCE: You know, 10-15 years ago there wasn't a whole lot of articles published about honey bees. Now I don't think there's anybody who can keep up with all of them. You know we're learning more and more about bees and I hate to say it, but it's probably because of CCD that people woke up and said "Hey, bees are really important for pollination and we're having troubles here." That really has promoted or spurred or incentivized the research efforts—all to our benefit.

Years ago, bees didn't have much problem, even with tracheal mites which kind of went away. But, all of a sudden CCD happened and we realized that we really haven't studied these bees as much as we should. Furthermore, there is their value to agriculture. People started to wake up and figure out honey bees are important. Sometimes I would go to the grocery store and buy 10 or 15 bags of sugar and people would ask me, why I buy so much sugar? And I reply, "I'm a beekeeper and I have to feed my bees." And that starts a whole conversation, how the bees are doing, and on and on. CCD has raised awareness of the honey bees and other bees as well.

JIM: Vince, I want to thank you for taking time over the holidays for this interview. May 2022 be a healthy one for you, Ellen, and all the girls in your back yard.

# FEATURED ARTICLES

## Notes from the Lab: The Latest Bee Science Distilled

By Scott McArt as published in American Bee Journal, November 2021



Scott McArt, an Assistant Professor of Pollinator Health, helps run the Dyce Lab for Honey Bee Studies at Cornell University in Ithaca, New York. He is particularly interested in scientific research that can inform management decisions by beekeepers, growers and the public.

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Facebook: facebook.com/dycelab | Twitter: @McArtLab

#### Are virus-contaminated flowers surrounding your apiary getting wild bumble bees sick?

s I write this, it's the beginning of fall in New York. Goldenrods and asters are filling the fields with brilliantly colorful flowers, honey bees and bumble bees are at their peak abundance, and the temperature is just right to get outside and enjoy it all. It's the most beautiful time of year in my opinion.

At the same time, more and more people want to speak with me about diseases in bees, perhaps because COVID is still on all of our minds. If you're one of those people, this article is for you. Perhaps one of the most interesting and important phenomena in bee disease ecology is happening right now, in and around our apiaries, while we all admire the flowers that are buzzing with bees.

Many species of bumble bees throughout the world are currently experiencing population declines, in part due to diseases. At the same time, it's well-known that the varroa mite is the most important risk factor for managed honey bee colonies across the globe. While varroa is host-specific and can only infest honey bees, the viruses it transmits are more cosmopolitan, especially Deformed Wing Virus (DWV). This virus has been found in hundreds of insect species and some recent studies have found that DWV can replicate in bumble bees and increase their likelihood of dying. Because of this, understanding how to limit DWV in bumble bees could help conserve them.

So, how do bumble bees get DWV? Can they get it from flowers that become contaminated from sick honey bees? Can sick bumble bees transmit DWV back to honey bees at flowers? How important is it to keep our colonies healthy, or to ensure there are abundant flowers around our apiaries, if we want to limit DWV transmission between honey bees and bumble bees? These are the topics for our forty-seventh Notes from the Lab, where we summarize "Flowers as dirty doorknobs: Deformed



Photo 1 Honey bees infected with Deformed Wing Virus (DWV) that are foraging on red clover flowers in small cages. This setup was used to assess whether DWV could be transmitted between honey bees and bumble bees via sequential foraging at flowers.

wing virus transmitted between Apis mellifera and Bombus impatiens through shared flowers," written by Alex Burnham and colleagues and published in the Journal of Applied Ecology [2021].

For their study, Burnham and colleagues conducted a suite of simple but elegant laboratory bioassays and incorporated the data into a new epidemiological model for DWV transmission and spread. This is a common approach in disease ecology; similar models have informed our response to COVID over the past year and a half. But instead of reducing COVID transmission, the goal of the authors' model was to understand how to limit DWV in honey bee colonies and the environment, thereby limiting spillover to wild bumble bees.

To do this, the authors created small colonies of uninfected common eastern bumble bees (*Bombus impatiens*) and allowed them to forage on red clover flowers in small cages (Photo 1). Four treatments of the flowers were compared: flowers randomly collected from the field, flowers inoculated with a field-realistic dose of DWV, flowers on which DWV-infected honey bees had foraged for three days, and sterile artificial flowers that acted as a control. At the end of foraging, all bees and flowers were screened for DWV loads (Photo 2).

Next, they inoculated artificial flowers containing a small tube of sucrose "nectar" in the middle to assess the



Photo 2 Author Samantha Alger screens samples for DWV in the lab.

number of viral particles that were acquired by bumble bees over progressively longer foraging bouts (Photo 3). These data were compared to a dose-response curve that assessed the amount of virus inoculum required to retain high levels of virus in bumble bees after pickup. In addition, inoculated bumble bees were allowed to forage on clean artificial flowers to see if they could contaminate flowers (i.e., if transmission could potentially work in both directions between honey bees and bumble bees).

Last, a model was created to study theoretical transmission dynamics within a honey bee population and spillover to bumble bees through shared foraging at flowers. The model was parameterized with results of the authors' study, previous observational datasets, and other data from the literature.

So, what did they find? Can DWV transmission occur between honey bees and bumble bees at flowers? Yes. As seen in Figure 1, ~30% of bumble bees foraging at flowers that were hand-inoculated with DWV (Hand Inoc.) or exposed to honey bees infected with DWV (HB Inoc.) tested positive for DWV three days after foraging. The loads of DWV in these bees were fairly high; average viral loads of ~10<sup>5</sup> and 10<sup>4</sup> genome copies, respectively (gray bars).

Interestingly, foraging at contaminated flowers for only a few seconds resulted in bees acquiring fairly high loads of DWV. As seen in Figure 2, the longer that bees foraged at flowers, the more DWV they acquired. But

P. Alex Burnham

Artificial flowers contaminated with DWV were offered to bees for varying amounts of time to assess the duration of foraging necessary for successful transmission.

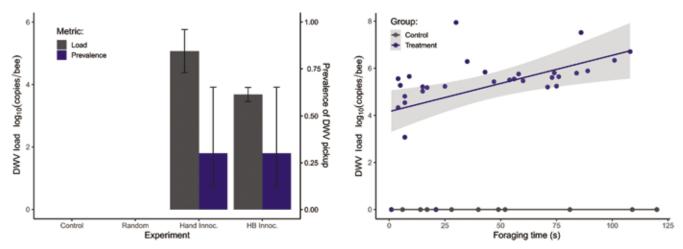
the important point from this figure is that even bees that foraged for only a couple seconds sometimes acquired in excess of 10<sup>5</sup> genome copies. That's very quick transmission at flowers!

Are bumble bees likely to get sick from the DWV they acquire at flowers? Good question. The authors inoculated bumble bees with varying DWV doses (between 106 to 107 genome copies) and assessed loads in bees three days post-inoculation. These doses are a bit higher than typically found on flowers, but previous studies have observed that some flowers do have levels of DWV in this range. Between 50-75% of the bumble bees still had 104 to 107 genome copies three days post-inoculation. This result suggests that at least some bumble bees may become infected after acquiring DWV from flowers in the field.

What does the model suggest we should do to reduce the number of DWV-infected bees? There are two major conclusions from the model. First, controlling DWV in honey bees greatly reduces the number of bumble bees that become infected. Perhaps this is intuitive, but the application of this knowledge is no less important. Because we know varroa infestations greatly increase DWV in honey bees, controlling varroa is therefore important for reducing DWV spillover to wild bumble bees.

The second major result is slightly less intuitive, but bear with me and I think you'll find it's easy to understand. The authors' model shows that increasing the number of flowers in the landscape (i.e., flowers surrounding our apiaries where both honey bees and bumble bees forage) will reduce the number of bumble bees that become infected. This is because bumble bees are less likely to encounter a contaminated flower when there are a lot more flowers than infected honey bees in a given landscape. I particularly like this result since more flowers also means more food for bees. In other words, more flowers is a win-win for pollinator health!

After reading this article, you may look at the flowers surrounding your apiary a bit differently. Perhaps you'll see them less as beautiful bouquets and more as "dirty doorknobs" where bees transmit disease. But we can all maximize the chances that the flowers are beautiful bouquets instead of "dirty doorknobs"! If we all do our part to promote as many flowers as possible and keep varroa levels low, I



(L) Fig. 1 The viral load (gray bars, left y-axis) and prevalence (blue bars, right y-axis) for bumble bees that have been exposed to DWV on flowers. Control bees foraged on sterile sucrose solution on artificial flowers, "Random" bees foraged on red clover haphazardly selected from the field, "Hand innoc." bees foraged on red clover that had been hand inoculated with a field-realistic dose of DWV, and "HB innoc." bees foraged on red clover that had been exposed to infected honey bees. Error bars for prevalence represent the 95% confidence interval. Error bars for load represent standard errors. (R) Fig. 2 The amount of virus acquired by a foraging bee as a function of foraging time. Blue dots represent individuals that foraged on inoculated artificial flowers while gray dots are control bees that foraged on sterile artificial flowers. Lines represent the line of best fit with shaded standard error. No bees that foraged on the control flowers were infected (gray dots).

think it's safe to say the 49 species of bumble bees in North America (and maybe more of our ~4,000 other species of wild bees) will be healthier.

Until next time, bee well and do good work.





# Historian/Historical Committee: In the moment, recalling the past and looking ahead.



By Doug Galloway, EAS Historian and Historical Committee Chairman.

The Eastern Apicultural Society's Historical Committee met for the first time on September 23, 2021. This new Ad-Hoc committee serves to aid, support and direct the efforts of the Historian in his responsibilities. Short- and long-term goals were discussed and have begun to take shape.

Records that have been kept in storage for some time were moved to the Historian offices where the process of review and organization has begun. A goal to have the pertinent records digitized and made available for the benefit of the EAS membership has been set in motion, with four companies offering insights into services available and related fees for the digitization and internet hosting. The digitization technology will utilize Optical Character Recognition (OCR) so that subject, authors, or key words can be searched, making the utilization of these documents more accessible to membership.

A vast majority of the EAS Journals is available for review on the EAS Website. Consideration for having these adapted to utilize OCR technology is also being considered, again allowing more thorough utilization by membership.

Over the years, many members have contributed documents, files, pins, t-shirts, journals and assorted

and sundry items to support the historical records of the Eastern Apicultural Society. As each annual conference reflects the personality of the hosting state, it is important to the Board of Directors to have that reflected in our historical record. We encourage and welcome any and all items you wish to donate both past, present and in the future that will allow historical records to reflect the contribution of members, hosting states and conference speakers. Highlighting the unique qualities along with the mandated statistical information for each EAS annual conference and having it available for membership review is our goal.

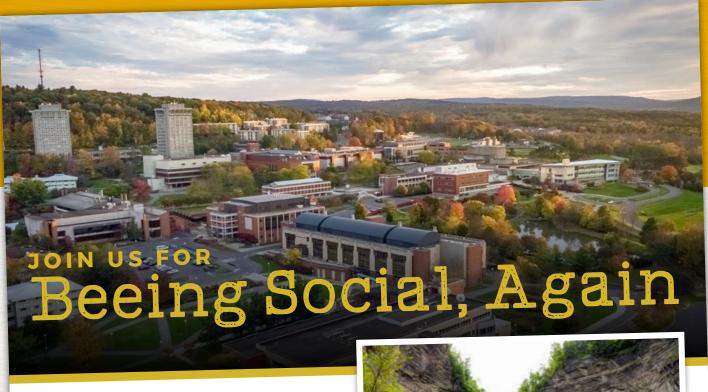
If you have item(s) you would like to contribute to the historical records of the Eastern Apicultural Society, send a short email synopsis with photos if available

or appropriate, of the item(s) you wish to contribute to Historian@ EasternApicuture.org.

Your Historical Committee thanks you for supporting our effort to create and maintain accurate and accessible historical records of the Eastern Apicultural Society.



## **EAS 2022 Conference**



# August 1-5, 2022

Our Beeing Social, Again 2022 Conference will be held at Ithaca College, Ithaca, NY on August 1-5, 2022. Ithaca College is a short drive from Ithaca International Airport and about an hour drive from Syracuse. Ithaca is readily accessible by car from the nearby major interstates, I-81 and I-90.





The conference will offer presentations on the latest honey bee research, colony management techniques and an outdoor apiary experience.

In 2022 we are able to return to our more traditional programming offering a Short Course from Monday through Wednesday as well as the Main Conference from Wednesday through Friday. The conference will host a honey show, children's program, painted hive boxes and social events including a BBQ at Kutik's Everything Bees in Oxford!

Details will be forthcoming on the Conference Page of the EAS Website: http://easternapiculture.org.

The conference team has been working diligently to formulate the EAS Conference 2022. As the short course and main conference come together we are assembling a roster of excellent speakers, including Dr. Tom Seeley, Professor of Biology Emeritus, in the Department of Neurobiology and Behavior at Cornell University, Dr. Scott McArt and Emma Walters – Cornell University and Peter Borst – Finger Lakes Bee Club. These folks will participate in both the short course and the main conference providing the latest in research, extension work and beekeeping.











The short course will feature experiences for all levels, from Beginners to Advanced. We are excited to collaborate with the historic Dyce Lab which will serve as the site of a portion of the short course as well as a microscopic component that will span both the short and full conference.

Kutik's Everything Bees, family owned and operated since 1978, will be hosting a Wednesday afternoon tour and demonstrations at their facility in Oxford. The day will culminate in a wonderful evening barbecue on site. An excellent opportunity to visit a commercial beekeeper with multiple endeavors including queen rearing, nuc production, pollination, and honey harvesting.

Auctions will include a virtual online auction before the conference, silent auctions during the conference and a live auction on the Thursday evening. If you or your company wishes to donate an item for auction, please check the web page for instructions.



Our vendors will have a large venue in which to demonstrate and offer their latest equipment and products – always a highlight of an EAS conference!

Additional social events will include a "dine around Ithaca" on Monday evening with registrants joining a local beekeeper at one of the varied restaurants in the area to chat bees and sample the local culinary scene.

The Ithaca area offers many local activities including hiking, boating and fishing in public parks and waterways and dining opportunities to fit any palate and budget. Accommodations range

from camping to dormitory accommodations to motel and hotel venues – something for everyone. The area is known for the production of wine and abounds with wineries and meaderies allowing you to sample the products of our local vineyards and apiaries.

We welcome you all to "Beeing Social, Again" at the EAS Conference 2022 to be held at the Ithaca College Campus in Ithaca, NY! Hope to see you there!



## **EAS Honey Show Updates**

By George H. Wilson, Co-Chairman, EAS Honey Show Advisory Committee

As 2021 comes to a close, we have time to consider our plans for next year. Unfortunately, we were unable to produce a honey show at the 2020 and 2021 EAS conferences. Plans go forward for a honey show reprise in Ithaca, New York this year while navigating the threat of the Covid-19 virus and all of its variations.

The EAS New York Honey Show Conference Chairman for 2022 is Mark Fiegl. He is very well respected in the honey show world, having taken top prizes at the EAS, ABF, and Apimondia Honey Shows. Mark has also served as a honey show judge in top level competitions. He is a member of the EAS Honey Show Advisory Committee and has the full support of all of his colleagues on that committee.

Another bright light on this year's show is the EAS president, Bob Talkiewicz. He has been a long-time entrant in past EAS honey shows and knows their importance to our craft. He has a great sense of perspective due to his experience. Additionally, Karla Eisen who has served on the EAS Honey Show Advisory Committee and has been by my side producing the last several EAS shows will join me in January 2022 as the Co-Chair of the EAS Honey Show Advisory Committee.

New York is currently focusing on on preliminary organizational issues for this year. They include recruiting sponsors, organizing team members to produce the show, and considering infrastructure issues. Should you be interested in becoming part of the team please do not hesitate to contact Mark Fiegl.

The Honey Show Rules were thoroughly reviewed updated and approved for the 2020 show that never happened and are currently under review. We do not expect any major changes and they will soon be posted on the EAS website. The changes that were made include clarifying the display frame to be one of pure comb honey (that means no wires or plastic foundation); matting required for photography as well as new photography judging criteria; and clarifying that class B4: Candles, novelty, single or coordinated set can have no color or embellishment, however these are allowed in class A3: novelty beeswax in the Arts and Crafts class. A new video class adopted for 2020 is under review.

As I write this, I am realizing just how much I have missed our past two honey shows. I miss working with our great teams, dealing with challenging infrastructure issues, marveling at the beauty of entered exhibits, sharing production tips, and experiencing all the emotions that are integral to honey shows.

It is my fond wish that everyone who attends this year's EAS conference will participate in the honey show.



# **COMMUNITY BUZZ**

## **Pollen Identification**

by Linda Mizer

Winter will bring the northern states into plant dormancy but further south plants still flourish and provide some nectar and pollen for the ever-busy honey bees. Not all flowers, however, are created equal in their ease of access to nectar and pollen and some plants hold hidden dangers for the attracted nectar gatherers!

The milkweed is an excellent source of nectar for honey bees, however, the unique flowers do not produce "loose pollen". Instead, the masses of milkweed pollen are stored in waxy sacs called *pollinia*. Pollinators land on the milkweed flowers to gather nectar but each milkweed blossom is equipped with a stigmatic slit into which the foot of a pollinator may slip and come in contact with a sticky pollinarium. When the insect pulls its foot out of the slit, it brings the pollinarium with it. As the insect moves to the next flower the pollen can be transferred into another stigmatic slit and pollination will be completed. It is possible, though, for insects to become stuck within a stigmatic slit and become unable to free themselves - they may even lose limbs as they pull themselves from the milkweed blossom! Pollinia that remain attached to the insects make it difficult for the insect to move. Despite the inherent risk and potential loss of the pollinator, the successful pollination of milkweeds provides for the continuation of Monarch butterflies that have experienced declines in the past few years.















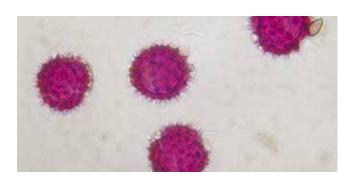
#### PHOTO CREDITS:

Gaillardia pulchella 6. Milkweed, Asclepias

1. Peter Borst

syriaca

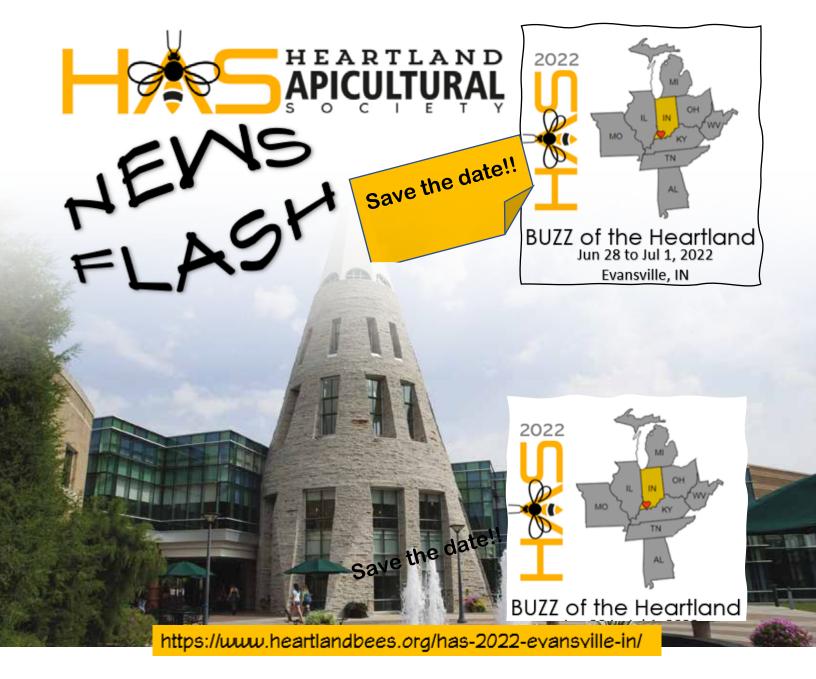
- 2. Peter Borst
- 3. Linda Mizer
- 4. Pamela Fisher
- 5. Dena Fitzpatrick
- 6. Peter Borst



Camellia sinensis is a species of evergreen shrubs or small trees in the flowering plant family Theaceae whose leaves and leaf buds are used to produce tea. Common names include "tea plant", "tea shrub", and "tea tree". Tea flowers are largely, if not completely, self-sterile and require cross-pollination by insects to produce seed.

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

## **Neighboring Associations News**



Can you believe it? After THREE.LONG.YEARS, <u>Heartland Apicultural Society's Annual Conference</u> is back for 2022! The **HAS2022** conference – the **BUZZ of the Heartland** – will be held in the heart of the heartland in **Evansville**, **IN** at the **University of Southern Indiana Conference Center**. Right in our own backyard! The conference dates are **June 28** through **July 1**. At this conference, you will network with fellow beekeepers from across the Heartland Region's nine member states.

The conference team has been busily preparing for next year's event. They are currently putting the finishing touches on a fresh agenda and lining up top-notch speakers from across the region (and country) for this long-awaited conference. Featured speakers include **Dr. Michael Smith** – Auburn University, **Dr. Brock Harpur** – Purdue University, and **Randy Oliver**! Over a dozen other presenters are also listed on the conference webpage. Check it out!

We invite you to type the URL into your browser to visit our web page. **TIP**: If you <u>bookmark</u> this page, it will be easier to return to it to get updated conference details, such as the complete list of speakers, program agenda, registration information, hotel arrangements, vendors and more as this information becomes available.

# **EAS BUSINESS**

## **EAS Board of Director's Fall Meeting Minutes**

Via Zoom, November 14, 2021

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

Those in attendance were: Lou Naylor, Chairman; Linda Allen Mizer, Vice Chairman; Bob Talkiewicz, President; Mary Duane, Vice President; Doris Morgan, Secretary; Jacky Hildreth, Treasurer; Dr. Leonard Davis, President Emeritus; Erin MacGregor Forbes, Chairman Emeritus; John Baker, Connecticut; Robert Bauer, Delaware; Kevin Platte, Washington D.C.; Brutz English, Georgia; Janet Anker, Maine; Carin Zinter, Massachusetts; Dorinda Priebe, New Hampshire; John Gaut, New Jersey; Mark Gingrich, Pennsylvania; Cindy Holt, Rhode Island; Nancy Simpson, South Carolina; Anne Fraser, Virginia; Sam Golston, West Virginia; Doug Galloway, Historian; Tammy Horn Potter, Honey Bee Health Coalition; George Wilson, Honey Show Committee; Erik Brown, Wild Apricot Lead; Steve Repasky, Master Beekeepers; Jim Fraser, Guest; Karla Eisen, Guest; Anna Gallow, Guest

#### STATES/PROVINCES IN GOOD STANDING:

Alabama, Connecticut, Delaware, District of Columbia, Georgia, Indiana, Maine, Maryland, New Hampshire, New Jersey, North Carolina, Ontario, Pennsylvania, Rhode Island, Vermont (vacant), Virginia, West Virginia

#### STATES/PROVINCES WITH EXPIRED DUES:

Florida, Illinois (vacant), Kentucky, Louisiana, Massachusetts, Michigan, Mississippi (vacant), New York, Ohio, Quebec (vacant), South Carolina, Tennessee, Wisconsin (vacant)

#### **SECRETARY'S REPORT** – Doris Morgan

The August 11, 2021 BOD minutes were distributed by email. Linda Mizer made a motion to accept the minutes. Erin MacGregor Forbes seconded the motion.

#### TREASURER'S REPORT – Jacky Hildreth

The Profit and Loss and Balance sheets were distributed by email. We had a very profitable conference. As of Sept. 30<sup>th</sup> we made \$82,000. The bulk of that came from a generous donation and the Honey Bee Research fund interest. We have a couple of bills that will need to be paid by the end of the year but overall it is a much better year than last year.

#### **CHAIRMAN'S REPORT** – Lou Naylor

It's good to hear we had such a good year. We need to note that we had one track, a shortened conference, fewer volunteers, fewer speaker expenses; we did very well with the three types of auctions and people donated generously. Going forward with Ithaca this year, we will still have to be very careful about expenses. We are trying to go bigger this next year with multiple tracks every day and a full five day conference. We will need to get the maximum out of the speakers and volunteers. All Directors should see themselves as volunteers and ask, "What can I do to help?" We have made a lot of progress in a lot of different areas, which you will hear about tonight.

#### PRESIDENT'S REPORT - Bob Talkiewicz

As soon as he heard that Ithaca College was a go, Bob reached out to Assemblywoman Donna Lupardo's office, Chair of the NY State Ag. Division. She sponsored a bill for beehives to be registered in NY State. She is going to see if she can get some support for the conference. Bob and Linda Mizer went to the NY State beekeepers conference known as ESHPA (Empire State Honey Producers Assoc.). They allowed Bob a half hour to talk about EAS coming to NY next year. The past president of ESHPA is the new president of ABF and has promised us support as well. Bob has been given the name of the faculty member at Ithaca College who co-ordinates their college beekeeping and will make contact with him to see about volunteers and/or using the Apiary as a secondary Apiary for the conference. Following his talk, Bob received a good response from the audience willing to serve as volunteers. Bob contacted a commercial beekeeper named Chuck Kutik that is about 30 minutes away and he is willing to give site tours. Bob also has a contact at the Ithaca/Tompkin County Visitor's Bureau who will be helpful in securing promotional materials for the conference.

#### **SITE INSPECTION COMMITTEE** – Lou Naylor

Ithaca is wonderful. The contract proposal for the use of Ithaca College as the conference site is being finalized. The specific dormitories that are of interest have not been accessible to date due to their being used for Covid-19 quarantine. From the description of the facilities, Lou feels confident that they will be comfortable. Additional dormitories will also be made available.

#### **FUTURE SITES**

Last week Linda Mizer and Lou Naylor went up to visit Mary Duane at the University of Massachusetts Amherst. They have reserved the week of July 31st 2023 for us. Mary said it is a massive university; there is an apiary on site. The university is very accommodating and they are rated number one in the US for Campus food. Every building on campus has a variety of food. They could not tour the dorms but Mary talked to students in the dorm we will be using and they said it is a newly renovated dorm and is gorgeous. The dorm is within walking distance of the 3 buildings that the conference will be accommodated in. Hartford, Connecticut is the closest airport and the university is an approximate 50-minute drive.

#### **COMMITTEE AND OTHER REPORTS**

#### **WEBSITE**

Our new website has been designed and is now up and running! The EAS technology team evaluated the content and layout of the previous web site and decided what would be moved over to the new web site to be preserved, updated and maintained. The Directors were given a brief tour of the new website that was designed to create a more visually pleasing, appealing and interactive website that is easier to navigate. The Board was enthusiastic in their support of the result. Keith Inglin and Erik Brown worked together to bring Wild Apricot functionally working to the new website. Lou Naylor requested that if anyone has something that they feel needs to be updated to send it to Doris Morgan at <a href="mailto:secretary@easternapiculture.org">secretary@easternapiculture.org</a>, who will serve as the single source to direct website requests to the technical team.

#### WILD APRICOT - Erik Brown

Wild Apricot is being changed to look more like the new web site. A media page has been added. This is where the EAS Journals will be. On the web site Keith Inglin has put together EAS Journals prior to 2020 that are open to the public to view. The 2020 and subsequent EAS Journals are only available to EAS members. Members will need to go to Wild Apricot via the link provided and log in to view them. In addition, available to EAS members only, there is a video page currently with 6 videos of lectures from the Kentucky 2021 EAS Conference that were recorded and edited for EAS by Dana Masters, an award winning videographer. Please give Lou Naylor any feedback on the videos.

At the Kentucky 2021 EAS Conference, the cost of EAS membership was voted on to be increased at the end of December 2021. As of January 1<sup>st</sup>, 2022 the EAS Journal will be digital and accessed by email by all members. Any EAS member desiring a printed copy of the EAS Journal will need to pay a separate fee of \$20.00 to receive one year of issues vua USPS. Lou Naylor stated that the Directors will continue to receive a printed copy of the Journal via USPS, which they can take with them to meetings to share. The paper copies are costing us \$9.00 an issue.

#### **JOURNAL** – Linda Mizer

Linda Mizer mentioned that prior EAS Journals have taken very long to be delivered by USPS. Even if we paid more for delivery there is no guarantee the EAS Journal would be delivered faster. Linda is hopeful that the printing and mailing prices will go down in the future. She is optimistic things will continue to go well and is interested to see how many people will request a printed copy of the EAS Journal in the coming year. Linda encouraged anyone who wants to contribute to the EAS Journal to do so. Tammy Horn Potter (Honey Bee Health Coalition) and Landi Simone (Master Beekeeper) both contribute to each EAS Journal and submission of pictures of bees with pollen are always encouraged.

#### **LIFE MEMBERSHIP** - Bob Bauer

There are 1108 full 1-year memberships, including family members, with 415 of these considered as active memberships. There are 1360 total memberships with all levels added together. There are 906 lapsed members. Bob Bauer asked the Directors to reach out to those with lapsed memberships to try to get them to rejoin EAS. Bob stated that having a conference in your state upped the number of memberships in that state. Maryland currrently has 154 members even though they have not had a conference in a while, Pennsylvania has 120 members and Virginia 115 members. Erin MacGregor Forbes asked everyone to encourage the people in their areas to join EAS to increase our membership numbers. Karla asked a question "Can Directors get a list of the members in their area that are lapsed?" It was decided no because of privacy issues.

#### **AWARDS** – Doris Morgan

Hambleton Award - Solicitation letter went out November 4, 2021 Roger A Morse Award - Solicitation letter went out November 4, 2021 Student Award - Solicitation letter went out November 4, 2021 Honey Bee Research Grant - Submission letter went out November 4, 2021 **Divelbiss** - Letters to go out in January 2022 for nominees MANN LAKE EAS SCHOLARSHIP - Letters to go out in January, 2021, Doris will coordinate with Brenda Kiessling.

There is information on the Hambleton, Roger A Morse, Divelbiss and Student awards and the Honey Bee Research grant on the new website.

#### **FINANCE** - Jacky Hildreth

In 2020, in the absence of a conference, there was little financial activity. Jacky will get in touch with the Finance Committee to review his accounting practices prior to sending the information on to the auditors to do the year end audit.

#### **HISTORIAN** – Doug Galloway

Lou Naylor announced that the Historical Committee has been activated and introduced Doug Galloway who was appointed on October 18, 2021 as EAS Historian and Chairman of the Historical Committee. Doug stated that he is a fairly new member, joining in 2017, so he welcomes everyone's input.

The Historical Committee meeting was called to meet via Zoom by Lou Naylor, EAS Chairman, on September 23,2021. In addition to Lou, attendee's included Albert Chubak, Erin MacGregor Forbes, Doug Galloway, Linda Allen Mizer and Tammy Horn Potter. Recommended by Lou Naylor, Betty Mencucci was approached about serving on the committee and she is going to join the upcoming meeting this coming Thursday.

The meeting covered a broad range of topics particularly:

1.Recovery of the historical records from storage at Erin MacGregor Forbes home has been accomplished.

- 2. Categorizing those records and determining what is to be retained and what is of no value and to be discarded will happen after Thanksgiving.
- 3, Determining if these stored files contain copies of those EAS Journals currently missing from the end of the early archives (1970's thru 1990's) till the beginning of 2007.
- 4. Exploring the digitization of older records, new records going forward and a permanent archive storage location providing EAS community access on some basis.

A records reduction firm has been contacted to begin the learning process and costs associated with digitizing the old records and new records going forward. The firm contacted, can coordinate hosting data files if needed for a charge of approximately \$180.00 annually. The service contacted, "Records Reductions, Inc.", is a regional firm, that uses Optical Character Recognition (OCR) technology allowing all documents to be searched via key words. The all-inclusive cost including scanning, installing scanned documents on a flash (thumb) drive or external drive as needed and either returning or shredding documents runs approximately \$600.00 per 10,000 documents.

In the EAS Bylaws, Article 8, the Chairman, Secretary and Treasurer are directed to send the Historian those records of historical significance defined in the Policy and Precedure Manual. Page 82 of the Policy and Procedure Manual identifies those records the historian is to maintain, including the above and those of the Master Beekeeper Program, plus computerization of those records as required. The Historical Committee intends to further clarify appropriate records to be maintained which will adequately reflect the spirit and personality of each annual conference and celebrate the contribution of each hosting state. We look forward to and welcome contributions from the BOD and members at large to achieve these goals.

#### **HONEY BEE HEALTH COALITION** – Tammy Horn Potter

The Honey Bee Health Coalition is continuing to meet, focusing on the Farm Bill and other Federal programs. The HBHC would like to have an in-person meeting in May 2022, quite possibly in Michigan.

#### **HONEY SHOW ADVISORY COMMITTEE** – George Wilson

George Wilson had 3 issues he wanted to touch on very briefly. George remarked that the progress on the honey show items on the website has been fantastic. He will have a few more items he will be sending as soon as he gets the information from the New York Honey Show Committee. This will include the honey show rules, the entry form and other information. George thanked everyone for all they have done. The Honey Show Advisory Committee has been working on guidelines on how to produce an EAS approved Honey Show. They hope to have them ready for the next conference.

George has been coordinating to make sure the Honey Show will go on in a smooth manner.

#### **LIFE MEMBERSHIP**

Jim Bobb is our Life Membership Chair. He was not able to attend the 2021 EAS Conference this year, Jim Gross stepped in for him and helped Lou Naylor give out the certificates and recognize new Life members. There was no life member social this year, however a group photo was taken. Lou does not know if Jim Bobb will be able to perform his duties this coming year so she has asked Jim Gross if he would be willing to step in if need be and she thinks he would be willing to do that again.

#### MASTER BEEKEEPERS – Steve Repasky

No report other than 10 people were certified this year.

#### **UNFINISHED BUSINESS**

Lou Naylor had asked John Gaut to review the Constitution and By-Laws looking for discrepancies and redundancies which may cause confusion. The main ones he saw had to do with membership, terms of office and qualification of directors. He has put together a document outlining what those discrepancies were and made recommendations to clarify those items. John said he could send it out to everyone to look at so that it can be discussed at the next meeting. The hierarchy is the Constitution first, the By-Laws second and the Policies and Procedures last. The Constitution is the hardest to change, the By-Laws a little easier and the Policies and Procedures the easiest as far as time required and voting procedures. Lou stated that the decision has been made to send out once a year a copy of the Policies and Procedures to the Directors and committee chairs in January.

#### **NEW BUSINESS**

Dorinda Priebe was approached by EAS member David Smith, formerly from Maryland, who moved to New Hampshire. He is a Master Beekeeper. He is getting along in years but in the past was very active in the certification process for becoming a Master Beekeeper. He has a large collection of approximately 103 bee-related books that he wants to make available to EAS. He is not sure what to do with them. He is willing to have them auctioned at the EAS auction with the proceeds to go to EAS. He is open to other ideas. Let Dorinda know what ideas you have. Dorinda is going to meet with him and write an article about him. Linda Mizer suggested having him sign them or to put a book plate into each one with his name on it.

Linda Mizer made a motion to adjourn the meeting. Brutz English seconded the motion.

Minutes respectfully submitted by Doris Morgan, EAS Secretary



## **EAS Executive Committee, Directors, and Contacts**

#### **EAS EXECUTIVE COMMITTEE**

#### Chairman of the Board

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#### Vice Chairman of the Board

Dr. Linda A. Mizer (2023) 1279 Spring St. Ext. Groton, NY 13073 607-227-4449 vicechairman@easternapiculture.org

#### President

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#### Vice President

Mary Duane (2022) 81 Blithewood Avenue Worcester, MA 01604 508-335-0433 vicepresident@easternapiculture.org

#### **President Emeritus**

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#### **Chairman Emeritus**

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#### Secretary

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#### **Treasurer**

Jacky B. Hildreth (2023) 3 Summit Terrace North Yarmouth, ME 04097 treasurer@easternapiculture.org

#### Membership Chair

Questions about renewing your membership? Please contact: Robert Bauer (302) 824-9090 director.de@easternapiculture.org

#### **EAS DIRECTORS**

Year indicates expiration of term as director

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#### **ADDITIONAL EAS CONTACTS**

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#### **EAS Journal**

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#### Web Master

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#### MB Advisor

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#### MB Certification Committee Chair

Landi Simone Gooserock Farm 101-B Taylortown Road Boonton, NJ 07005 973-263-0674 beeladylandi@gmail.com

#### Membership

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#### **Honey Show Advisory Committee**

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#### Honey Bee Health Coalition

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### **Eastern Apicultural Society**

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