16th Annual Conference
Heartland Apicultural Society
Evansville, IN
July 13 -15, 2017
SUMMER IS HERE!

Get Strong Bees with SuperDFM-HoneyBee.

SuperDFM-HoneyBee is **SAFE** to use during Honey Flow.

Probiotic supplement for honey bees.

Created by microbiologists for honey bee health.
I’d like to welcome you to the 16th annual Heartland Apicultural Society conference. The staff, faculty and employees of University of Southern Indiana are excited to host our beekeeping conference for the first time.

Take time to visit the Art Exhibit and the Honey Show in the Traditions Lounge, walk along the halls and talk to the many vendors that have joined us this year, most of all visit with friends that you haven’t seen since last year’s conference.

We’ve seen this conference hosted in many states with many different speakers, agendas and vendors. The one remaining constant is the solid foundation on which we started. I’m reminded of the story that beekeepers pass on about honey being found in Egyptian tombs. The honey was about 3,000 years old and still edible. I’m just glad they built the pyramid to store that honey so it stayed safe all those years.

As you enjoy the conference, attend the many sessions and meet new friends, look around and not only say “Hello”, but “Thanks” to the many volunteers that help bring this conference together.

Debbie Seib, HAS President
University of Southern Indiana (USI) was founded in 1965 as a regional campus and was called Indiana State University Evansville. It is located on the far west side of Evansville on the original 1,400 acre purchased in the founding year.

Members of Indiana State University, Southern Indiana Higher Education (SIHE), Indiana State University Evansville (ISUE) and the Evansville community gathered to break ground on the new campus in 1967.

Although born in Michigan, Robert D. Orr grew up in Evansville and became the 45th Governor. In 1985, Governor Orr granted independence to the university, signed the school's charter and started a new chapter as the University of Southern Indiana.

There are currently over 10,000 dual credit, undergraduate and graduate students enrolled in 80 majors including more than 200 International students. The majority of the students remain in Indiana.

Many buildings have been added and the classroom space has nearly doubled. Additional buildings since 2010 include Business and Engineering Center (opened in 2010), the Applied Engineering Center (2013), the Performance Center (2014) and the Griffin Center (2016).

For over 50 years, leadership of the university has always been strong beginning with David L. Rice who served as president until 1994. President Rice saw enrollment grow from under 1,000 to over 7,000 students before he retired.

President H. Ray Hoops followed in Rice’s footsteps by growing the university enrollment by over 20% before his retirement in 2008. He was instrumental in initiating the volunteer program by student, faculty and employees.

The third president of USI is Linda L. M. Bennett. Dr. Bennett has been teaching for over 25 years. Before being appointment president, she served as the provost and Vice-President of Academic Affairs. USI saw the approval of it’s first doctoral program — Doctor of Nursing Practice — by the Higher Learning Commission.

University Center East and West marks the center of the campus and while the buildings are relatively new, the materials are steeped in Indiana history.
Our conference is hosted mainly in the University Center and you’ll notice many of the items below.

As you step off the elevator, you’ll notice the Orr Iron Arch in the Heritage Lounge. This arch was the main entrance to the 1912 Orr Iron Company originally located at 1800 Pennsylvania Avenue. Samuel Orr was the company founder and was succeeded by Robert D. Orr, the governor that granted independence to the university 1985.

This photo was contributed by Patricia Sides, Archivist of Willard Library.

The Art Exhibit and the Honey Show will be displayed in the Traditions Lounge. The lounge is the second level of the 97’ conical tower. The walls are made of oolitic Indiana limestone. In Indiana, the greatest production of limestone occurs in the area near Bedford and Bloomington. This “stone belt” is approximately two miles wide and thirty miles long. Indiana Limestone is produced in only three counties in the state: Lawrence, Monroe, and Owen. The limestone in the tower and throughout the center is from B.G. Hoadley Quarry in Bloomington, Indiana.

Chair legs, steam-bent, have been assembled and stained to form rosettes. They were created by the Jasper Chair Company which has been making quality furniture since 1921. Twelve hundred of these chair legs are suspended from the ceiling of the Fireside and Heritage lounges.

For 110 years, the Can Clay Corporation located in Cannelton, Indiana has produced clay sewer pipe, flue lining, chimney tops, fireplace throats and filter block. To cover the structural steel columns in the University Center, the Can Clay company created, 21” diameter clay pipe and vertically constructed them over the columns. They also cut A-blocks to form the cylindrical walls enclosing the fireside and student lounges.

Since 1888, the Alcoa name has been synonymous with the aluminum industry. The Alcoa Warrick Operations in Newburgh, Indiana created 8 benches of ingot weighing approximately 2,300 pounds.
COME HEAR THE VOICES OF BEE CULTURE SPEAKING THE WAY THEY WRITE

ANN HARMAN – Cooking with honey and being a better beekeeper
CLARENCE COLLISON – The science of honey bees
TONI BURNHAM – Urban bees and beekeeping
KIM LEHMAN – Kids and bees
ED COLBY – Tales from Colorado
JAY EVANS – Found in Translation
PHIL CRAFT – Ask a Q, he’ll have an A
LARRY CONNOR – Bee biology and more

JESSICA LOUQUE – Honey bee research, in person
KIM FLOTTUM – Herding cats
KATHY SUMMERS – Keeping it all on time
NOT IN PERSON, BUT FROM THE MAGIC OF TECHNOLOGY...
JIM TEW – Beeyard thoughts from Ohio and Alabama
JENNIFER BERRY – Raising queens and cane
ROSS CONRAD – From Vermont, Naturally

PLUS –
All day Friday, Root Candles Factory Tours so come early and see that show.

SIGN UP ON REGISTRATION FORM

Friday, September 22:
Tours all day 10AM – 4PM, then, 5PM – 7PM meet the speakers, social hour up close and personal.

Saturday, September 23:
8:30 – 4:30, speakers all day, bring your camera and notebook, a Wonderful lunch included, plus live demos, and weather permitting, be in the beeyard with Bee Culture’s beekeepers (bring your veil)

Sunday, September 24:
8:30 – 4:30, speakers all day, bring your camera and notebook, a Wonderful lunch included, plus live demos, and weather permitting, be in the beeyard with Bee Culture’s beekeepers (bring your veil).

Schedule details, updates and information on our web page and in the next issue.

HOTEL ACCOMMODATIONS:
Holiday Inn Akron West: 4073 Medina Road, Akron OH, p: 330.666.4131
Hilton: 3180 W. Market St., Akron OH, p: 330.867.5000
Hampton Inn: 3073 Eastpointe Dr., Medina, OH, p: 330.721.9855
Spitzer House B&B: 504 W. Liberty St., Medina, OH, p: 330.952.2129
Super 8 Motel: 5161 Montville Dr., Medina, OH, p: 330.723.8118
Quality Inn: 1435 S. Carpenter, Brunswick, OH p: 330.225.1112

Never been done before, probably won’t ever happen again. You really don’t want to miss this once in a lifetime event.

REGISTER NOW! $100/PERSON, $150/COUPLE
www.beeculture.com
Course Descriptions

A
Apitherapy – Dr. Ami Rice

B
Bee Behavior - Dr. Zachary Huang. We will discuss behaviors: washing board, vibrational dance (dorsal ventral abdominal vibrations, DVAV), cleaning dance, trophallaxis, waggle dance, etc.

Bee Behavior in Apiary - Dr. Zachary Huang. We will be opening a hive and observe common behaviors: washing board, vibrational dance (dorsal ventral abdominal vibrations, DVAV), cleaning dance, trophallaxis, waggle dance, etc.

Beekeeping 101 - Jake Osborne will discuss basic beekeeping.

Beekeeping Laws - Judge Dan O’Hanlon will discuss laws that affect beekeepers.

Building Boxes & Frames - Jake Osborne will demonstrate how to assemble hive boxes and frames.

Beginning Hive Inspection - Kathleen Prough (In the Apiary) will demonstrate how to inspect a hive.

Bee Informed Partnership - Mike Wilson explains the importance of The Bee Informed Partnership. The Bee Informed Partnership is a non-profit that works with beekeepers to determine which management practices work best. Thousands of varroa and nosema samples, as well as viral and pesticide results, and national survey loss numbers have been collected by this and other co-operating projects in recent years. The database housing these results has a publicly accessible interface at bip2.beeinformed.org. Visualizations of this honey bee health data can help us better understand our bees and how to determine if our practices are affective, or need adjustment. You can get connected with this effort to provide data and/or samples and get reports that put your experiences in the context of national and regional trends.

Bee virus - Hongmei Li-Byarlay.

C
Checking Mite Counts - Sophie Lohrman (In the Apiary) will be demonstrating the sugar roll method for testing for varroa mites.

Creating your own pesticide-free pollinator habitat - Michele Colopy will teach how to create pesticide free pollinator forage in an urban front yard, including available “guides” to create habitat, city land use regulations, seed selection, planting and maintenance, through the provision of “natural bee food.”

D
Dead Outs - Judge Dan O’Hanlon will help you diagnosis your dead out hives.

Diagnosis for nosema and tracheal mites – bring a bee sample - Dr. Tom Webster will use a microscope to check honey bee for nosema and tracheal mites.

Drones - Dr. Larry Connor will discuss what is happening with drones.

Field Tour of "Bee Photography" - Dr. Zachary Huang (In the Apiary) will demonstrate how to get good pictures of honey bees.

G
Getting Started - Jake Osborne will discuss what you need to know to get your first hive.

Good or Bad Queens - Dr. Larry Connor

Hive Inspection - Dave Shenefield (In the Apiary)

Hive Inspection - Kent Williams (In the Apiary)

Honey Bee anatomy – The inside story - Dr. Tom Webster will use a microscope to look at the honey bees anatomy.
Course Descriptions

Honey Bee Decline and Native Bee Conservation - Dr. Jeff Harris

Honey Bee Immune Systems - Hongmei Li-
Byarlay

Honey Bee research at the University of Guelph -
Dr. Ernesto Guzman gives an overview on research projects in University of Guelph bee lab.

Honey Harvest - Jake Osborne

Honey Plants - Roy Ballard will explain that pollinators depend on flowering plants… flowering plants depend on pollinators and we depend upon them BOTH! Ultimately the goal is to identify ways that we can collectively improve the environment for all pollinators in both large and small ways.

Impact of Neonicotinoid Insecticides on Honey Bees - Nuria Morfin. Neonicotinoid insecticides are the most widely used insecticide worldwide. Honey bees are constantly exposed to sub-lethal doses of neonicotinoids, as adult bees and also during the developmental stage through contaminated pollen and nectar. In this research, we investigated the effect of a realistic exposure to clothianidin under laboratory conditions, on honey bee health and behavior in Ontario, Canada.

Impact of Nosema Ceranae infections on honey bee health and economics - Dr. Ernesto Guzman explains the results of studies conducted in their lab that show how miticides affect honey bees and that conclude what are the most and the least damaging acaricides to use in hives.

Indications of a Healthy Hive - Dr. Jim Tew answers Exactly what is a healthy hive anyway? Healthy hives are for the moment. In the bee world, things can change quickly. Healthy now, but sick tomorrow. What should the beekeeper know and expect.

Is Breeding Varroa Resistant Bees. Our answer to the problem? - Dr. Jeff Harris

Making Nucs - Kent Williams

Making Nucs & Splits to Sell - Dwight Wells will discuss how creating nucs with locally adapted queens is the heart of the change to successful Beekeeping. Making nucs to sell to local beekeepers especially beginning beekeepers will improve local honey bee genetics. This presentation will provide info on the about, why and how to successfully create and sell nucs early in the spring.

Native Pollinators – Dr. John Skinner

Oxalic Acid Demo - Andy Lohrman (In the Apiary) Demonstration and instruction on treating your hives with oxalic acid.

Pesticides wintering in your hives - Michele Colopy. End of summer losses, and early winter losses are being attributed to high pesticide loads within the food stores of honey bees. Learn the pesticide exposure routes for bees, and the synergistic effects created.

Q & A - Jerry Hayes will answer questions from the beekeepers.

Evaluating queen problems In the Apiary - Dr. Stu Jacobson discusses all aspects of queens. The queen is the “heart” of a colony and ones with failing queens or that have become queenless are major sources of colony losses. How can you be sure your hive has a queen in a hive -- what if it swarmed 10 days ago and there is no sign of a one? What if there are two queens? How can you introduce a queen to a laying worker colony? We will examine colonies for queen health and potential problems and discuss the steps needed to identify and remedy common difficulties that arise with queens.
Course Descriptions

Queen Rearing for the Backyard Beekeeper - Kent Williams

Removing Bees Cutouts & Trap outs – Andy Lohrman will explain the difference between a cutout and a trap out. He will walk through the process of how to remove bees from structures and the process of a trap out.

Seasonal Management - Dr. Larry Connor

Seasonal Management - Larry Kemerly

Sending Bees to Almond’s - Dave Shenefield

Signs in the Hive You May Miss - Kathleen Prough will show signs that beekeepers may miss when inspecting their hives. Signs of queen problem, virus problem, varroa mites, small hive beetle and wax moths damage, needing honey supers, need feeding and more.

Small Hive Beetles - Barbara Bloetscher will cover basic biology and habits of the small hive beetle and how to manage them in the apiary. Techniques to avoid attracting the beetles, minimizing the level of infestation and managing populations will be covered as well as tips on how to help bees defend themselves from pests such as the small hive beetle.

Sustainable Beekeeping - Earl Hoffman

Sustainable beekeeping workshop – Dr. Stu Jacobson. How does a sustainable apiary differ from one that is dependent on chemicals and packages? What are some core principles and practices that can be considered sustainable and which ones are not? Must you have top bar or other “natural” hive designs? When is “treatment free” not sustainable? We will look at these and other considerations in this workshop. Participants will be encouraged to share their ideas and experiences.

Synergistic Effect of Varroa with Pesticides - Nuria Morfin will show the effect of honey bees that are exposed to a variety of stressors, biotic and abiotic. V. destructor, is one of the most damaging pests for honey bees, and neonicotinoids have been pointed out as one of the causes of colony mortality in North America. This research focused on the synergistic effect of two of the main stressors affecting honey bees, on cellular and humoral immunity, and also on behaviors that are essential for colony survival.

Tips to enter Honey Shows - Dave Shenefield

Top Bar Hives - Gregg Roudebush will review the pros and cons of using a Top Bar hive to keep your bees. He will compare this design to the standard hive.

Top Bar Hive – Inspection - Gregg Roudebush (In the Apiary) will walk through how to inspect your bees in a Top Bar hive.

Varroa Mite & Treatments - Dwight Wells

Varroa is the number one issue with Honey Bees in the world. Understanding how to learn to live with Varroa will increase your Beekeeping success. The presentation covers how Varroa affects queens, drones and colonies, monitoring Varroa populations and their control through Integrated Pest Management.

Viral Transmission - Hongmei Li-Byarlay

What Do Bees See? - Dr. Zachary Huang

Wax Comb, the Colony’s Skeleton - Dr. Jim Tew Comb and the subsequent bees wax are fundamental building material of the honey bee nest structure. Yet, it is so much more: a communication device, a chemical absorbing device, a wintering structure, a dance floor, and more. This discussion reviews the complexity and functionality of honey comb.

Writing Grants - Tammy Horne-Potter
For Beginners

For beginner beekeepers, we have classes in the apiary and the classrooms. We have dedicated all the classes in room UC227 to beginning beekeeping. The courses in this room will be repeated all three days so if you can’t attend one, be sure to mark down the repeated date and time. Jake Osborne and Larry Kemerly will be teaching the beginner’s track classes. These classes should be followed up with the “In the Apiary” session with Kathleen Prough, Stu Jacobson, Gregg Roudebush and the Lohrman’s. You will find many other talks for beginners to attend. Beginner beekeepers will find these topics to be very helpful to them. On the schedule, you will find apiary sessions listed under “Apiary 1 & 2” and the classroom sessions listed under “All”.

Classes in the apiary helpful for beginners:
- Beginning Hive Inspection – Kathleen Prough
- Top Bar Hive Inspection – Gregg Roudebush
- Queen and Problems – Dr. Stu Jacobson
- Checking Mite Counts – Sophie Lohrman
- Oxalic Acid Demo – Andy Lohrman
- Field Tour of “Bee Photography” – Dr. Zachary Huang

Classes in the classroom helpful for beginners:
- Native Pollinators – John Skinner
- Creating your own pesticide-free pollinator habitat – Michele Colopy
- Wax comb, the Colony’s Skeleton – Dr. James Tew
- Honey Plants – Roy Ballard
- Signs in the hive You May Miss - Kathleen Prough
- Indicators of a healthy Hive - Dr. James Tew
- Q & A – Jerry Hayes

### Pollen From Plants

<table>
<thead>
<tr>
<th>Plant</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Acacia</td>
<td>25%</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>21%</td>
</tr>
<tr>
<td>Almond</td>
<td>26%</td>
</tr>
<tr>
<td>Beans</td>
<td>22%</td>
</tr>
<tr>
<td>Blackberry</td>
<td>20%</td>
</tr>
<tr>
<td>Blueberry</td>
<td>14%</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>11%</td>
</tr>
<tr>
<td>Canola</td>
<td>23%</td>
</tr>
<tr>
<td>Clover</td>
<td>25%</td>
</tr>
<tr>
<td>Corn</td>
<td>15%</td>
</tr>
<tr>
<td>Lavender</td>
<td>19%</td>
</tr>
<tr>
<td>Locus</td>
<td>25%</td>
</tr>
<tr>
<td>Pear</td>
<td>26%</td>
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<tr>
<td>Peas</td>
<td>30%</td>
</tr>
<tr>
<td>Pine</td>
<td>7%</td>
</tr>
<tr>
<td>Raspberry</td>
<td>20%</td>
</tr>
<tr>
<td>Sunflower</td>
<td>15%</td>
</tr>
<tr>
<td>Willow</td>
<td>18%</td>
</tr>
</tbody>
</table>
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**Registration Schedule**

<table>
<thead>
<tr>
<th>Setup</th>
<th>Business Hours</th>
<th>Registrants</th>
<th>Dorms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday</td>
<td>Noon - 5:00 p.m.</td>
<td>Noon - 5:00 p.m.</td>
<td>2:30 p.m. - 6:00 p.m.</td>
</tr>
<tr>
<td>Thursday</td>
<td>8:00 am to 5:00 p.m.</td>
<td>7:30 a.m. - 6:00 p.m.</td>
<td>7:30 a.m. - 6:00 p.m.</td>
</tr>
<tr>
<td>Friday</td>
<td>8:00 am to 5:00 p.m.</td>
<td>7:30 a.m. - 6:00 p.m.</td>
<td>7:30 a.m. - 6:00 p.m.</td>
</tr>
<tr>
<td>Saturday</td>
<td>8:00 am to 2:00 p.m.</td>
<td>7:30 a.m. - noon</td>
<td></td>
</tr>
</tbody>
</table>

Note: All hours are CST
If you are lost and cannot find the location for dorm check-in, please call Debbie Seib, 317-432-9578

**Annual Honey Show Schedule**

<table>
<thead>
<tr>
<th>Drop Off Show Entries</th>
<th>Top Awards Presentation</th>
<th>Show Open to Public</th>
<th>Post-Show Pick Up of Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday 2:30 p.m. - 6:00 p.m.</td>
<td>Friday evening, BBQ Dinner 7:30 p.m.</td>
<td></td>
<td>Beeswax entries only</td>
</tr>
<tr>
<td>Thursday, 7:30 a.m. to noon</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Dorm Check-in Ruston Hall**

- **Lost Key Fee:** If you lose your key, you will be charged $60.
- Trash must be removed from the room and placed in outside trash containers
- Take your linens, pillows, etc when checking out.

**Art Exhibit**

We have many items on display in the Traditions Lounge (UC West). There is Beeswax sculptures, prints, copper sheet bee art and more. There is also a special group of hexagon wood plagues painted by children around the state. The plagues will be hung on the shed at the Airport Apiary. Stop by and say Hi to Doris as you browse through the beautiful prints. Some are being sold to benefit the Heartland Apicultural Society.
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Parking Lots we’ll be using: Navy circles
Lot A – E (depending on construction how much is available in Lot C)

Buildings for classes: Green circles
UC East and West
LA (Liberal Arts)

Apiary: Orange circle
Grassy field by Reflection Lake

Dorms: Red circle
In Ruston Hall
Music provide by The Steve Greenwell Trio. The Trio has been performing in Indiana, Kentucky, Illinois and Michigan since 1991 in various settings for numerous events. The band has performed smooth jazz, country and light rock at casinos, various clubs, special and private events. Members include Scott Mercer (guitar), Danny Erkman (drums) and Steve Greenwell on sax.

We will host a Movie Night on Wednesday at 7:30 pm in Carter Hall. A classic film called “City of the Bees” by Moody Institute of Science Presentation and “Keep the Hive Alive” by the Pollinator Stewardship Council

Program Agenda:
7:00 pm - 7:20 pm: Guest arrive and enjoy snacks.
7:20 pm - 7:30 pm: Introduce the film
7:30 pm to 8:00 pm: Watch City of the Bees film
8:00 pm to 8:10 pm: Introduce the film and Michele from the Pollinator Stewardship Council
8:10 pm to 8:40 pm: Watch Keep the Hives Alive film
8:40 pm to 9:00 pm: Question and Answer session/discussion
9:00 pm Wrap up the event

Ice-cream Social will be on Thursday at 7:00 pm in Carter Hall. Cake and Ice-cream are always a favorite.

Cost is free, so if you didn’t sign up, but would like to join us, stop by the registration desk before noon on Thursday to pick up a ticket.

We love that good ole fashion BBQ. Join us in Carter Hall for a night of great food, music and conversation. The cost is just $17 and includes fresh fruit, bow tie pasta salad, potato salad, baked beans, BBQ chicken, BBQ pulled pork and assorted cookies.

We’ll be announcing the Honey Show winners at the dinner.

If you’d like to join us but didn’t sign up, stop by the registration desk before noon on Thursday.
Ballard, Roy  
- Roy Ballard is the Purdue Extension Educator for Agriculture and Natural Resources for Hancock County, for the past eleven years.  
- Mr. Ballard holds a B.S. degree in Agricultural Education from Purdue University and a Masters Degree in Secondary Education from Indiana University.  
- He also serves as the Indiana Sustainable Agriculture Research and Education (SARE) Professional Development Program (PDP) Coordinator.  
- Roy is a beekeeper and a gardener in his time away from the office.

Bloetscher, Barbara  
- Barbara Bloetscher has been the State Entomologist/Apiarist at the Ohio Department of Agriculture since 2009  
- She worked in Extension at The Ohio State University for 23 years  
- As State Entomologist, she oversees the Apiary Program and identifies insects and other arthropods submitted from Ohio.  
- Barb monitors the County Apiary Inspection Program and addresses honey bee issues in the state.

Colopy, Michelle  
- Michele Colopy has been the Program Director of the Pollinator Stewardship Council since March 2013.  
- Her father was a beekeeper in southeast Ohio, and she keeps honey bees in the city.  
- Ms. Colopy holds a Master’s degree in Nonprofit Management/Arts Administration.  
- She is also the Treasurer of Ohio State Beekeepers Association.

Connor, Dr. Lawrence  
- Lawrence earned his doctorate in honey bee pollination of crops at Michigan State University.  
- He was the Extension Bee Specialist at The Ohio State University.  
- He was the President of Genetic Systems.  
- Dr. Connor owns and operates WicWas Press and edited and published over two dozen books.  
- Connor is a monthly contributor to The American Bee Journal and to Bee Culture Magazine.

Given, Krispn  
- Mr. Given is an Apiculture Specialist, for the past twelve years working with Dr. Greg Hunt at Purdue University and maintains 110 colonies.  
- Krispn also teaches the instrumental insemination class each year at the university and gives lectures to beekeepers around the country.  
- Dr. Greg Hunt and Krispn Given developed the “mite-biter bees” that is starting to generate much interest around the country for beekeepers and breeders of honey bees.  
- Krispn is part of the HAS Queen Rearing and Apiary team.
**Guzman, Dr. Ernesto**

- Dr. Ernesto Guzman is a Professor and Director of the Honey Bee Research Centre in the School of Environmental Sciences at the University of Guelph in Ontario Canada.
- He got a DVM degree in 1982 and obtained M.Sc. and Ph.D. degrees in Entomology from the University of California at Davis in 1989 and 1992, respectively.
- Dr. Guzman has worked for several research and academic institutions in Mexico, The USA and Canada. His research has focused on genetics, behavior, and diseases of honey bees.
- Ernesto is author and co-author of more than 300 publications, including scientific and trade journal articles.

**Harris, Dr. Jeff**

- Jeff Harris is the extension/research apiculturist at Mississippi State University.
- Jeff came to Mississippi after working for 15 years as a scientist with the USDA, ARS Honey Bee Breeding Lab in Baton Rouge, LA.
- He is best known for breeding lines of honey bees that express high levels of Varroa Sensitive Hygienic (VSH) behavior, which is a primary mechanism of resistance to Varroa mites.
- He received a doctoral degree in insect physiology (Department of Zoology & Physiology) and a Master’s degree in entomology (Department of Entomology) from Louisiana State University.

**Hays, Jerry**

- Jerry Hayes is the Honey Bee Health lead for Monsanto's newly formed BioDirect business unit.
- Jerry was the Chief of the Apiary Section for the Florida Department of Agriculture and Consumer Services. He was responsible for the regulatory health of the 350,000 colonies in the State of Florida.
- For the past 30 years Jerry has written a monthly column in the American Bee Journal called The Classroom and a book by the same name.
- Jerry is a founding member of the Colony Collapse Working Group, a science advisory board member for Project Apis mellifera (PAm), the Bee Informed Partnership, and he serves on the Steering Committee of the Honey Bee Health Coalition.

**Hoffman, Earl**

- Earl Hoffman manages a 40 acre farm in SW Michigan.
- Earl has been a beekeeper for over 25 years and normally run between 50-80 hives.
- We are currently collaborating with microbiologists from lovely Milwaukee, WI.
- Mr. Hoffman has been performing field trials with bacteria, enzymes, yeast and fungi for over four years.
- He is an EAS Master Beekeepers since 2001.

**Horne-Potter, Tammy**

- Tammy started Coal Country Beeworks in 2008, working with surface mine companies to get more habitat in Eastern KY.
- In 2014, Tammy became the KY State Apiarist and was the 2014 President of EAS
- Mrs. Horne-Potter is the author of Bees in America: How the Honey Bee Shaped a Nation and Beeconomy: What Women and Bees teach us about Local Trade and Global Markets (both published by University Press of Kentucky).
- Tammy currently serves EAS as the EAS representative to the Honey Bee Health Coalition.
**SPEAKER BIOS**

**Huang, Zachary 韓智勇**
- Zachary Huang is an associate professor in entomology at the Michigan State University.
- Zach was awarded the J.I. Hambleton Award for Outstanding Research by the Eastern Apicultural Society of North America in August 2008.
- He is known for developing the social inhibition model (at UIUC) which explains how nurse to forager transition is regulated.
- Huang is also known for the mitezapper (MSU) which is a non-chemical control for the infamous *Varroa destructor*.
- Zachary is an award winning photographer with many of his images published on bee trade magazines.

**Hunt, Dr. Greg**
- Greg is a retired professor from the Entomology Department at Purdue University.
- He began keeping bee in 1987 as a hobby, while working in Madison, WI, the first year that varroa mites were discovered in the US (in Wisconsin).
- He published the first genetic map for the honey bee genome and his lab studies show how genetics influence bee behavior.
- Dr. Hunt has worked with beekeepers doing research and extension and was a founder of HAS. He and Krispn Given have selected for “mite-biter” bees and they are promoting the use of northern-bred bees.

**Jacobson, Dr. Stu**
- Stu lives in central Illinois where he produces northern adapted, varroa survivor queens and nucs.
- He has been beekeeping since the 1970ies, worked with Africanized bees for a year in Venezuela, and helped found and served as the first president of the Illinois Queen Initiative (IQI).
- He teaches classes on queen rearing and related topics at Lincoln Land Community College and is retired from the University of Illinois-Springfield.

**Kemerly, Larry**
- Larry Kemerly, just retired last summer from FedEx.
- He started keeping bees 20 years ago and plans to grow his honey business along with producing bees and queens.
- Mr. Kemerly keeps over 100 hives and is expanding.
- He teaches many of the beginning beekeeping classes for Indiana beekeepers.

**Li-Byarlay, Hongmei**
- Hongmei is a bee biologist at North Carolina State University.
- She received her doctoral degree in Entomology from Purdue University.
- Hongmei’s research interests focus on the stress, behavior, and genetics of honey bees (*Apis mellifera*). Specifically, most of her work involved in the mechanisms of pathogenic and environmental stressors in honey bee behavior and health.
- She has published 23+ peer-reviewed publications and one book chapter.
- She was awarded a MiniSeq sequencer for genomic studies of bees.
Kovaleski, Joe
- Joe has been keeping bees for 23 years and is an EAS Master Beekeeper, West Virginia Master Beekeeper, Ohio Master Beekeeper, and Ohio State 2008 Beekeeper of the Year.
- Joe has won the 2012 EAS Bee Culture Magazine Award and the 2014 West Virginia State Beekeepers Association Best of Show Award for Beeswax.
- He is currently the Crossroads Region director for the Ohio State Beekeepers Assoc and President of the Buckeye Queen Producers group in Ohio.
- Mr. Kovaleski is also Secretary/Treasurer of the Heartland Honey Bee Breeders Cooperative and the Ohio director for the Heartland Apicultural Society.

Lohrman, Sophia
- Sophia is 15 years old but will assure you that she has 20 years of beekeeping experience.
- Sophie and her father have been beekeeping together for the last 7 years and currently have 35 colonies in the Clay County area.
- She has been involved with numerous honey bee cut-outs (removals from buildings, structures, trees, and other hollow objects) and swarm retrievals.
- Sophie is a knowledgeable beekeeper that loves to share her experiences with others.

Lohrman, Andy
- Andy Lohrman was the founder of the Clay County Bee Keepers Club. He saw the club grow to over 50 regular attendees.
- He currently keeps around 35 hives in Clay County area.
- Andy served two years on the board for the former Indiana Beekeepers Association.
- He designed an oxalic acid vaporizer with a heat control unit and a portable bee vacuum that focused on killing less bees when capturing a swarm.
- Andy passed on his passion for beekeeping to his daughter, Sophia.

Morfin, Nuria
- Nuria Morfin has been working with honey bees since 2006.
- She received her Master Degree from the National University of Mexico working with Africanized bees.
- Nuria has also worked with the stingless bee Scaptotrigona Mexicana.
- Ms. Morfin is a PhD candidate at the University of Guelph studying the interaction of neonicotinoid insecticides, viral infection and Varroa destructor infestation on honey bee health and behavior in controlled laboratory conditions.

O'Hanlon, Judge Dan
- Judge Dan O'Hanlon has been keeping bees for almost 40 years and raising queens for almost 25 years.
- He was chosen as West Virginia Beekeeper of the Year in 2011.
- He is the Founding President of the West Virginia Queen Producers and the Founding President of the Heartland Honey Bee Breeders Cooperative.
- He has spoken many times at HAS, EAS and to many state bee associations.
Osborne, Jack
- Jack was an Apicultural Specialist for Kelley Beekeeping Co.
- He has been keeping bees for 20 years and has roughly 100 honey producing hives.
- Mr. Osborne is an officer of the Kentucky State Beekeepers Association.
- He main focus is to help guide new beekeepers and develop new products for Kelley's.

Prough, Kathleen
- Kathleen has been the State Apiary Inspector for Indiana since 1994.
- She was the seasonal Apiary Inspector for Michigan Dept. of Agriculture from 1988 to 1992.
- She has a Bachelor of Science degree from Western Michigan University, Biology Major.
- Ms. Prough was born and raised in Michigan and currently resides in Franklin, Indiana
- She serves as an advisor to The Beekeepers of Indiana state association.

Rice, Ami
- Ami graduated from Indiana University.
- She is a practicing physician and a professor at the Indiana University School of Medicine (IUSM).
- Ami has demonstrated commitment to women’s health and to making birth control accessible and affordable for all women.
- She has been a member of the state beekeeping organization since 2014.

Roudebush, Gregg
- Gregg is a Life Member of The Beekeepers of Indiana.
- He is the Facilitator of the Top Bar Beehive class at the Indiana Bee School.
- He has been keeping bees since the early 1980’s and after a few years off he returned to beekeeping a few years ago.
- Mr. Roudebush is a passionate top bar beekeeper and builds his own equipment.
- Gregg served as a county councilman and held the office of President.
- His favorite quote is by Benjamin Franklin “Any fool can criticize, condemn and complain and most fools do.”

Seib, Debbie
- Debbie is the co-owner of Seib’s Hoosier Honey in Mooresville, IN.
- She has been a beekeeper for over 30 years and is currently the Treasurer of The Beekeepers of Indiana.
- She also serves as the webmaster and the newsletter editor.
- Debbie is the current Heartland Apicultural Society Treasurer and the Indiana delegate for the Eastern Apicultural Society.
- Beginning in 2016, Ms. Seib began serving as the State Delegate director on the board of the American Beekeepers Federation.
**Shenefield, Dave**
- Dave is a lifelong commercial beekeeper produces nucs and raises queens.
- He is one of the founders of the Indiana Queen Breeders Association and a Life Member of The Beekeepers of Indiana.
- Dave is the past president of The Beekeepers of Indiana, served on the National Honey Board for region 7 and the chair of Honeybee Committee for Indiana Farm Bureau.
- Mr. Shenefield now serves as the President of Indiana Queen Breeders and is the Indiana representative for the Heartland Honeybee Breeders Association

**Skinner, John**
- Dr. Skinner is a Professor and Extension Apiculture Specialist at the University of Tennessee where he has worked on research, teaching and extension for 26 years.
- He trains extension agents to work with local bee associations throughout Tennessee.
- He coordinates a Master Beekeeper Program, leads the Bee Health extension site and is part of the BIP and NAPPC to reduce colony losses.
- John enjoys reading, hiking, fly fishing and tying, singing and foraging.

**Tew, Dr. James E**
- Dr. Tew is the Beekeeping Specialist for the Alabama Cooperative Extension System, Auburn University and Emeritus Professor, The Ohio State University.
- Jim has taught classes, provided extension services, and conducted applied research on honey bees and honey bee behavior - specifically pollination behavior.
- He received the first EAS Roger A. Morse Teaching/Extension/Regulatory Award and contributes monthly articles for national beekeeping publications and has written several books including *Backyard Beekeeping*

**Webster, Dr. Tom**
- Tom Webster is an Associate Professor at Kentucky State University. He grew up in Illinois and received his undergraduate degree in Biology at Oberlin College.
- Tom completed graduate work in entomology at the University of California at Davis.
- He did postdoctoral research on pesticide poisoning of bees pollinating alfalfa in the Joaquin valley.
- Since 2013 he has been teaching Apiculture and Pollination Biology

**Wells, Dwight**
- Dwight Wells has a passion is promoting Sustainable Beekeeping, which creates low over- winter losses, and mentoring and educating beekeepers.
- Dwight is presently working on several projects which include Purdue Leg Chewer Honey Bees, a SARE Grant Project trapping swarms in remote areas and comparing the swarms against commercial stock and Purdue Leg Chewers.
- Mr. Wells is also working with Wright Patterson Air Force Base managing 10 colonies of Purdue Varroa Resistant honey bees as part of the WPAFB Bee City USA Project.
Williams, Kent

- Kent is President of the Lake Barkley Beekeepers in Wingo, Kentucky.
- He is the past president of Eastern Apiculture Society (EAS), a EAS master beekeeper.
- Mr. Williams is a frequent speaker at EAS, Heartland Beekeepers Society (HAS) and many other regional and state conferences.
- Kent maintains around 400 colonies which he keeps in his home state of Kentucky and south Mississippi.
- He has for several years raised his own queens from survivor hives which he uses to make nucs and requeen established colonies.

Wilson, Mike

- Michael E. Wilson is a part-time beekeeper in East Tennessee where he also works for the Bee Informed Partnership as a database programmer.
- Michael has kept bees since 1999 and has raised queens since 2006 at Rosecomb Apiaries.
- He manages over 200 colonies primarily for honey production, developing locally adapted stock has been an important part of his beekeeping.
- Through work with the Bee Informed Partnership, Michael helps collect, organize, and analyze data from thousands of beekeepers to inform management decisions.
LYSON W229 12 FRAME RADIAL EXTRACTOR

Available in a manual or motorized version.

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We designed this 12 frame extractor with our partners at Lyson. We think it’s the perfect size for hobbyist. Those who choose the manual extractor can upgrade with a motor when they’re ready. Both models feature a heavy duty welded stainless steel basket, stainless steel drum and honey gate, and adjustable steel legs with bolt holes (to attach to the floor or a pallet).

We’ve included two FREE additions to make this extractor more useful during extracting season:

- **Tangential Cappings Bags (2)**
  Cappings honey can comprise up to 10% of your harvest. Don’t waste this resource. Fill with a layer of cappings and spin in your extractor.
  A $29.90 Value!

- **Deep Frame Inserts (2)**
  When you have a few deeps to extract, these inserts allow you to do the job, allowing you to extract two deep frames tangentially.
  A $50 Value!

Lyson 12 Frame Manual Extractor
Features a heavy-duty gearbox with steel shaft and gears, with a built in brake that applies when you turn the handle in reverse.
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Complete 10 Frame Super: $119.95  Complete 8 Frame Super: $114.95

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HEAR YE, HEAR YE

It’s official, The Missouri Board has committed to host HAS in 2018. The location will be in St. Louis and there are a plethora of things to do besides attend the conference. Put in for some extra days off and visit some of the other wonderful sites to see, just to name a few:

- The Arch
- The Natural History Museum
- The St. Louis Zoo
- Anheuser-Busch Brewery Tour

And the not to be missed:

- Dr. Greg Hunt's birthplace

Many of the attractions are free. Make plans now to be sure and attend next year’s 17th Annual Heartland Apicultural Society Conference.
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