

The Missouri State Beekeepers Association Brood



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Missouri State Fair Just Around the Corner

The Missouri State Fair apicultural entries will be accepted this year on Monday, August 6, 2018, between the hours of 8:00 AM and 5:00 PM. Judging will be on Tuesday which gives the State Fair Committee time to set the booth up on Wednesday the day following the honey and apiculture judging. The fair officially begins on August 9th through the 19th.

All information including the entry classes and the competition registration forms are available on www.MoStateBeekeepers.org website.

Remember as a competitor you are considered a Vendor by the Department of Agriculture. So you will need to sign the form at both signature places. Also they encourage you to give them your bank routing information; if you prefer not to give this information to them your check will be delayed but you will eventually receive it by US Postal Service.

Dean Sanders is taking names of those interested in working at the MO State Beekeepers Association Fair booth. Dean may be reached at 816 456-4683. Several clubs have signed on for the full day which is greatly appreciated! If you wish to sign on as a group or as an individual please contact Dean to reserve your place and ticket for entry into the MO State Fair in Sedalia, MO.

The MSBA will also recognize at the Fall Conference MSBA members who won State Fair classes. The MSBA will award \$200 to the outstanding MSBA member exhibitor in Division A who won the Grand Champion Ribbon. Matching monetary awards will be given to MSBA members who place first in Divisions A and B Classes.

This will be Dean Sanders final year as MSBA Fair Chair. Jim Reeves from Blue Springs will be learning the ropes this year. If you can't work the booth stop by to say thanks to Dean for years of service and hello to Jim.



Practice your queen-spotting skills at www.mostatebeekeepers.org
On the front page you'll find a photo of a frame of bees, see if you can find the queen

From the President

by Clayton Lee

We need your help with two subjects!

1. MSBA Awards: Both the July newsletter and our website has information about the 2018 MSBA Awards. Please read them over and consider making a nomination.
2. Conference Contests: We are looking for a person to lead the MSBA contests at the Fall and Spring Conferences. Erin Mullins did a great job in the past and developed some criteria. We also have supplies ready to go. If you would consider leading this effort, let me know.

I continued to look through Roger Nichols' MSBA newsletters (<https://mostatebeekeepers.org/newsletters/>). I found some interesting notes from the 1988 newsletters. In the March issue (page 6), there is a history of EMBA article. In the October issue (page 4),



there is an interesting article on "Who was Missouri's First Beekeeper." In the November issue (and November 1989, too), Governor John Ashcroft declared November as "Apicultural Month."

Another short reminder that the 2018 MSBA Fall Conference will be held in Kirksville, MO. Our theme will be Recognizing Our Beekeepers of the Years! We would like to give some special recognition to all the past recipients!

Feel free to let me (or anyone on the Executive Committee) know what you would like to see the MSBA accomplish. My email is leeland55@gmail.com. I hope your days will be filled with great times with honey bees!

History Tidbit In The Beginning

April 22, 1903,
John Nebel went
to Moberly,
Missouri where
he assisted in
the organization
of the Missouri
Bee-keepers
Association and
was elected as
President.



JOHN NEBEL.

MSBA Membership

Membership dues remain at \$10 per individual. You may renew your membership by going to the MSBA website and utilizing PayPal or mail your check to me with your first and last names, address, telephone number, and email address. I gladly accept batch memberships if given the information on a typewritten list and either a check from the local club's treasurer or secretary.

With the change of the website some folks have renewed well in advance of their membership expiration. You should now receive notice the month preceding your membership expiration. While the website is going through growth spurts please contact me if you have questions regarding your membership. Some of you have paid until 2019! Thank you for supporting MSBA!

Wanda Johnston
MSBA Membership
401 NW Heady Avenue
Ferrelview, MO 64163
mailto:bees@kc.rr.com

2018 Missouri State Beekeepers Association Awards

Nominations may now be submitted for these 2018 MSBA Awards:

- Lifetime Achievement Award;
- Beekeeper of the Year;
- Junior Beekeeper of the Year; and
- Mentor of the Year.

The award criteria and the nomination form are on the MSBA website at <https://mostatebeekeepers.org/awards-nomination-form/>. Nominations may be submitted on line, which is preferred, or directly via email to Bill Allinder (William.allinder@gmail.com), Dan Lake (DanoDClwn@aol.com), and Bob Brammer (rbrammer@cvalley.net). The nominations should include adequate information to demonstrate that the nominee meets the award criteria. The description of qualifications should be sufficiently extensive to permit an informed comparison against other nominees for the same award.

Nominations must be submitted by September 1st. The awards will be presented at the Fall Conference on October 19th. At the Fall Conference, the MSBA will also recognize members who won State Fair classes. \$200 will be awarded to the outstanding MSBA member exhibitor in Division A who won the Grand Champion Ribbon. Matching monetary awards will be given to MSBA members who place first in Divisions A and B Classes.

The MSBA Executive Committee will also consider other possible awards this year, such as the MSBA Volunteer of the Year and State Fair Volunteer of the Year.

Award Criteria:

1. Lifetime Achievement Award:

- Active MSBA member who has given many years of service in promoting the art of beekeeping, promoting the MSBA, mentoring beginning beekeepers, assisting other

beekeepers, and actively volunteering in support of MSBA activities

- Nominated by Executive Committee, a local association or a MSBA member

2. Beekeeper of the Year:

- Did the most to promote the art of beekeeping
- Promoted membership in MSBA
- Promoted the MSBA
- Publicized beekeeping and introduced the art of beekeeping to prospective future beekeepers
- Was an active member in good standing in the MSBA
- Nominated by a local association or MSBA member
- Not a member of the MSBA Executive Committee

3. Junior Beekeeper of the Year:

- Age 18 or younger
- Enthusiastic beekeeper
- Has been a beekeeper for at least 1 year (i.e., at least a second-year beekeeper)
- Promotes beekeeping
- Good peer-group role model
- Nominated by a local association or MSBA member

4. Mentor of the Year:

- Actively promoted beekeeping by teaching and guiding new beekeepers in the art of beekeeping
- Was an active member in good standing in the MSBA
- Nominated by a local association or MSBA member
- Not a member of the MSBA Executive Committee

2018 Fall Conference Agenda

FRIDAY, OCT 19

General Sessions

8:15 Welcome, Clayton Lee MSBA President

8:30 – 9:15 AM Jerry Hayes “Best Practices for Keeping Bees”

9:15 – 9:30 AM Q & A Jerry Hayes

9:30 - 9:40 AM Break

9:40 – 10:20 AM Dr Judy Wu-Smart “Effects of Pesticide Residues in Brood Comb”

10:20 – 10:30 Q & A Dr Judy Wu-Smart

10:30 – 10:50 AM Break / Vendor Hall

10:50 – 11:30 AM Jerry Hayes “What is Monsanto doing for Honey Bee Health?”

12:00 – 1:00 PM Lunch

1:05 – 1:40 PM Dr Julian Rangel, “Factors that affect Reproductive Health in Queens and Drones”

1:50 – 2:30 PM Dr Judy Wu-Smart, “Troubleshooting Queen Failures”

2:30 – 2:50 PM Break / Vendor Hall

2:45 – 3:15 Q & A Panel Jerry Hayes, Dr Rangel, Dr. Judy Wu-Smart

3:20 – 4:15 PM

Breakout Workshops

Option # 1 Chef Bill Allinder, “Cooking with Honey”

Option # 2 Grant Gillard, “Nicot Queen Rearing”

Option # 3 Charlotte Wiggins, Master Gardner, “Native Planting for Honey Bees & Pollinators”

5:00 – 5:45 Vendor Hall Open

6:00 PM Awards & Ambassador Banquet

SATURDAY, OCT 20

General Sessions

8:15 Opening Remarks, Clayton Lee

8:30 – 9:15 AM Dr Julian Rangel, “Queen Rearing Basics”

9:15 – 9:30 AM Q & A Dr Rangel

9:40 – 10:20 AM Jerry Hayes, “HBHC, Tools for Varroa Management”

10:20 - 10:40 AM Break / Vendor Hall

10:40 – 11:15 MSBA Business & Recognition

11:30 – 12:30 Lunch

12:30 – 12:45 Vendor Hall Open

12:50 – 1:30 Dr Julian Rangel, “Biology of Mating”

1:45 – 2:45 PM

Breakout Workshops

Option # 1 Cliff Hollenbeck, Commercial Beekeeper, “Marketing & Honey Sales”

Option # 2 Jane Summe, Isabees Inc., “Small Scale Extracting, Bottling, & Labeling”

Option # 3 Chef Bill Allinder, “Cooking with Honey” (Same presentation as Friday)

3:00 PM MSBA President Clayton Lee

Business

Drawings

Closing Remarks



2018 Fall Conference

October 19-20

A Salute to Beekeepers of the Year Past and Present



Truman State University - Student Union Building
901 South Franklin St., Kirksville, Mo 63501

Register online at
www.MOStateBeekeepers.org
Receive two free tickets for a
prize drawing.

Conference Cost \$65.00 Please note this fee does not include membership dues or meals.
MSBA Member Registrations submitted online and before
September 29, 2018 will receive a \$10.00 discount.
(This early registration discount will be refunded back through PayPal™ once membership is verified)
Saturday Only Registration \$45.00 (Early member discount does not apply for Saturday Only)

Featured Speakers:
Jerry Hayes
Judy Wu-Smart
Dr. Juliana Rangel

Optional Meals:
Friday Noon meal/lunch - \$15.00
Friday evening banque - \$16.00
Saturday Noon meal/lunch - \$15.00

Breakout Classes:

Chef Bill Allinder, "Cooking with Honey"
Grant Gillard, "Nicot Queen Rearing"
Charlotte Wiggins, Master Gardner,
"Native Planting for Honey Bees & Pollinators"
Cliff Hollenbeck, Commercial Beekeeper,
"Marketing & Honey Sales"
Jane Summe, Isabees Inc.,
"Small Scale Extracting, Bottling, & Labeling"

Vendors:

Missouri Wildflowers



Lodging

Days Inn Kirksville- \$69.99
1-660-665-8244
University Inn & Suites - \$89.
1-660-627-1100
Hampton Inn - \$95
1-660-956-4686



A number of rooms have been blocked off at each of
these hotels until September 25.
When you call the hotel tell them you're
with the MSBA Conference to
receive the above pricing.



Missouri State Beekeepers Association

2018 Fall Conference

October 19-20, 2018

Student Union Building – Truman State University
901 South Franklin Street, Kirksville, MO 63501

Online Conference registration at www.MOStateBeekeepers.org will earn you two (2) FREE tickets for prize drawing!!! You can pay your dues online, too. Thank you!

Regular mail registration (Please print name as you prefer on name tag):

First Name:

Last Name:

Street: City: State: Zip Code:

Email: Telephone: () -

Your Local Beekeeping Club/Association:

Conference Cost: \$65. Please note this fee does not include membership dues OR meals.

MSBA Member Registrations submitted online & Before September 29, 2018 will receive an \$10 discount (off the regular \$65)! This early registration discount will be refunded back through PayPal™ once membership is verified.

Individual (Friday and Saturday) \$65.00 X =

Optional meals (please let us know if you prefer vegetarian or gluten free meals):

A. Friday noon meal/lunch. \$15.00 X =

B. Friday evening banquet. \$16.00 X =

C. Saturday noon meal/lunch. \$15.00 X =

Individual (Saturday Only). \$45.00 X =

Please Note that Registrations Received On or After September 29, 2018 will be accepted at the same price, but meal purchases are not guaranteed.

Other

Honey Queen/Ambassador Fund Donation (\$10.00 Suggested):.

TOTAL AMOUNT ENCLOSED: \$

If you have any questions, please email Bruce Snavely Conference Chairman brucesnavely@hotmail.com

If you cannot register online, please make checks payable to the **Missouri State Beekeepers Association** and send it along with your completed registration form to: **Clayton Lee, 90 East Pope Lane, Smithville, Missouri 64089.**

Lodging: There are several hotels in Kirksville. We contacted a few and have rooms blocked off for MSBA members until September 25th. When you call the hotel tell them you're with the MSBA Conference to receive this pricing.

Below please find some with their contact information:

- Days Inn Kirksville, 3805 S. Baltimore, Kirksville, MO 63501, (660) 665-8244, \$69.99. Twenty (20) rooms available.
- University Inn & Suites, 2702 South Franklin St., Kirksville, MO 63501, (660) 627-1100 \$89. Forty-five (45) rooms available
- Hampton Inn, 2604 N Baltimore St, Kirksville, MO 63501, [\(660\) 956-4686](tel:6609564686) \$95. Thirty rooms (30) available.

Most Asked Questions about HAS

By Charlotte Ekker Wiggins, MSBA East Central Regional Director; HAS Volunteer/Public Relations, msbacharlotte@gmail.com

Which one is it, "HAS" or "H-A-S" as if you are spelling it? However you pronounce it, Heartland Apicultural Society (HAS) is having their annual conference July 11-13, 2018 at Washington University in St. Louis. Started by several entomologists in 2002, the non-profit educational organization is focused on bringing the latest scientific beekeeping research as well as classes to Midwest beekeepers. Since there are 9 states in the group, the conference rotates through Missouri every decade or so.

When I first started beekeeping, I asked more experienced ones what conference they would recommend and the majority said HAS. It's the main reason why I agreed to help plan the conference this year in St. Louis. It was a good opportunity to get to know other beekeepers, and volunteers, who make this 3 days of beekeeping discussions possible.

Yes, HAS is also an all-volunteer organization. They do rely on people from local clubs, organizations and associations to pull off the conferences under the guidance of Debbie Seib, their treasurer. Debbie offers planners a book of HAS "rules" and guidelines and has been an invaluable source of information, and encouragement, to get this annual event to this point.

Five Most-Asked Questions About HAS

To get you ready for the conference, here are the most asked questions about HAS:

1. Should I bring a bee suit?

Yes, there will be a bee yard with 18 hives set up. Even if you are not part of the queen-rearing classes or hands on demonstrations, you can get up close if you are dressed properly. Here is what to expect if you have never been to a HAS conference: <http://www.heartlandbees.org/never-heres-expect/>

2. Is there free parking?

Yes if you are staying in the campus dorms. If not, there



St. Louis -- Missouri State Beekeepers Association President Clayton Lee, another HAS volunteer on the vendor committee, helps Ralph Samples, right, measure the proposed space for where the 18 bee hives will be set up during HAS at Washington University in St. Louis. (Photo by Charlotte Ekker Wiggins)

is paid parking available. All attendees will be getting an email with more details once they register.

3. Can I order from a vendor and pick up at HAS?

There are more than 30 vendors coming so check with the vendor you plan to buy from to make sure they have room to bring your items but yes, we were told attendees should be able to pre-order from participating vendors. You will find the vendor list here: <http://www.heartlandbees.org/vendors-at-has/>

4. I missed the early bird registration, can I still register?

You can still pre-register online through July 5. Cost is \$150 for three days or \$55/day. <http://www.heartlandbees.org/register-today/> You can also register the day you walk in; same prices apply.

Continued on page 14

Beekeeping Society Extends Online Registration Deadline

ST. LOUIS – Due to the July 4th holiday, Heartland Apicultural Society (HAS) has extended its online registration deadline from June 30 through July 5 to make it more convenient for beekeepers to register. This is Heartland Apicultural Society's 17th annual beekeeping conference on the campus of Washington University in St. Louis July 11-13, 2018.

Attendees may also register in person at the HAS registration table in Anheuser-Busch Hall starting July 11.

Online registration is available at <http://www.heartlandbees.org/>

Known as HAS (pronounced H*A*S) the conference will offer beekeepers a uniquely inexpensive, abundant program led by a distinguished faculty of beekeeping authors, instructors, research and applied scientists, and regional experts.

The course curriculum includes hands-on apiary and laboratory demonstrations, scientific research reports, and panel discussions, presented over three days in a world-class research university setting. Practical skills, for beginners and experienced beekeepers, such as queen-rearing, making nucs, hive inspections, mite control, making candles, comb and creamed honey, and bottling and labeling will complement the scientific presentations.

Research reports will focus on colony health developments, organic and biological pest control, and technology's effects on pollinators, agriculture, and the environment.

Beekeepers can also participate in a honey show with winners announced Thursday, July 12.

Evening events will include dinner with live music and a movie on campus on Wednesday, July 11; a tour and buffet dinner at the world-famous Anheuser-Busch Brewery Thursday, July 12 and an evening banquet at the #1 ranked St. Louis Zoo on Friday, July 13.

The conference schedule is posted at <http://www.heartlandbees.org/2018-schedule/>

Each keynote speaker is scheduled for three presentations. Some of the highlights include:

- Dr. Marla Spivak, MacArthur Fellow and University of Minnesota professor, will open the conference with her perspective on how events are shaping the future of beekeeping.
- Dr. Dennis vanEngelsdorp, director of the Bee Informed Partnership at the University of Maryland, will provide perspectives on hive management based on his years of collecting and analyzing hive management survey data.
- Dr. May Berenbaum, professor and head of the Entomology Department at the University of Illinois, will address effects of agricultural technology on honey bees.
- The University of Minnesota Bee Squad, a team of professional beekeeping instructors, will present beekeeping techniques in classrooms and in the bee yard during each breakout session of the conference.
- Keith Delaplane, professor and director of the University of Georgia Honey Bee Program, will address the practical challenges of integrating hive management with evolution and ecology, and present classic talks on honey bee biology.
- Dr. Dewey Caron will present his comprehensive perspectives on the art and science of beekeeping.
- Dr. Samuel Ramsey from the University of Maryland will present ground-breaking and inspiring research regarding varroa destructor.
- Jennifer Berry, University of Georgia research manager, will report on her recent studies of oxalic acid applications.
- Leading agricultural and entomological scientists will participate in moderated panel discussions of some of the most important and controversial topics affecting bees and beekeepers.

For more information and to register, visit <http://www.heartlandbees.org>.

--July 11-13, 2018 in St. Louis --

2018 Heartland Apicultural Society Honey Show

We invite you to enter the 2018 Heartland Apicultural Society Honey Show, which will be held during the 2018 HAS Conference in St. Louis, Missouri. This is a prime opportunity to showcase your bees' abilities to produce the purest honey and the best wax, in addition to a chance to showcase your artistic and creative sides by entering our cooking and/or art/craft classes.

The Honey Show will showcase the best examples of honey, beeswax, cooking, and creativity. It includes eleven (11) classes: seven (7) for honey, one (1) for beeswax, two (2) art/craft classes, and one (1) for cooking.

After the entries are judged, they will be added to the raffle to benefit Heartland Apicultural Society and the promotion of our industry.

Awards will be presented during the Brews & Bees Event at Anheuser-Busch Brewery on Thursday night July 12, 2018.

See below for the official show rules/regulations and entry form. NOTE: You will need to hand deliver your entries. You can bring your payment for your submissions along with your entries to the conference.

2018 HAS Honey Show registration deadline: 6 pm on Wednesday, July 11, 2018

Questions? Contact Tim Fredricks via e-mail at t.jacks.mo@gmail.com

MSBA Swarm Catchers List

A Call For Assistance

Earlier this year we made a swarm catchers list available to all MSBA members. This list was to be advertised to any places that receive calls about swarms. While the majority of swarms are over for the year there may still be a few true swarms and there are always absconding hives that need a new home. If you are on the list please help the rest of us out and advertise it to local 911 centers, animal control or

any place else that may be notified of a swarm. If your local club already has a list then please advertise it first and add a link to the state list at the bottom in case they can't get anyone from the local list. Please if you are on the list and do receive a call if at all possible try to assist the person even if it is just educating them on the difference between honey bees and yellow jackets.

Official Rules and Entry Form 2018 Heartland Apicultural Society Honey Show July 11 - 13, 2018, St. Louis, Missouri

2018 HAS HONEY SHOW ENTRY FORM

Bring this form with appropriate fees to 2018 HAS Registration desk **by 6 pm on Wednesday, July 11, 2018.**

NAME _____ PHONE _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Email _____

Please check the class you are entering and mark your entry with class code:

- ☐ **A** Light/Amber Honey
- ☐ **B** Dark Honey
- ☐ **C** Black Jar Honey
- ☐ **D** Chunk Honey
- ☐ **E** Comb Sections (Ross Rounds, Square Wooden Sections, Cassette Type)
- ☐ **F** Cut Comb Honey (in ~4x4 Plastic Cut Comb Boxes)
- ☐ **G** Creamed Honey
- ☐ **H** Beeswax Candles
- ☐ **I** Bee Art (drawing, photography, painting, etc.)
- ☐ **J** Bee Craft Item (wood, leather, yarn, fabric, mosaic, clay, etc.)
- ☐ **K** Cookies/Bars with Honey

NUMBER OF ENTRIES _____ AT \$5.00 EACH. TOTAL AMOUNT ENCLOSED \$ _____

For payments by credit card, include card number, exp. date, name of cardholder, security code, and signature.
CREDIT CARD: Amex, Visa, Discover or Mastercard

Name on card: _____

Card number: _____

Expiration (MO/YEAR): ____/____ Verification Code: _____

Signature _____

All entries will be judged and then put in the raffle, with the proceeds going to Heartland Apicultural Society.

**Your entry must be delivered 2018 HAS Conference Registration desk by 6 pm on Wednesday,
July 11, 2018.**

2018 Heartland Apicultural Society Honey Show

Contest Specific Requirements/Information

REQUIREMENTS:

- Honey - **three** (3) 1-lb. jars, or **three** (3) sections of comb honey.
- Black Jar Honey – single jar, outside of jar painted black.
- Beeswax Candles - entry weight: **one half pound (8 ounces) to 2 lbs.**
- Cookies – honey as primary sweetener, recipe included in submission.
- All entries **must have labels** submitted for application after judging (*DO NOT LABEL ENTRIES WITH PERSONAL IDENTIFYING MARKS*).
- Must be 100% honey or 100% beeswax produced by the entrant, except as noted.
- Art/Craft must be primarily produced by the entrant.
- All entries will be included in the raffle to benefit Heartland Apicultural Program.

ENTRY FORM: Use the accompanying entry form. Photocopies are acceptable.

ENTRY FEE: \$5.00 per entry. A person may enter as many classes as desired; one entry per class. A check or money order payable to Heartland Apicultural Society, cash, charge form should accompany the entry form to cover entry fees.

CLASSES:

A	Light/Amber Honey
B	Dark Honey
C	Black Jar Honey
D	Chunk Honey
E	Comb Section Honey (Ross Rounds, Square Wooden Sections, Cassette Type)
F	Cut Comb Honey (in ~4x4 Plastic Cut Comb Boxes)
G	Creamed Honey
H	Beeswax Candles
I	Bee Art (drawing, photography, painting, etc.)
J	Bee Craft Item (wood, leather, fiber, fabric, mosaic, clay, etc.)
K	Cookies/Bars with Honey

**Each entry will be marked with the correct class at check-in.*

DEADLINES: Your entry must be delivered 2018 HAS Conference Registration desk **by 6 pm on Wednesday, July 11, 2018.**

CONTAINERS: Entries in incorrect containers may be disqualified. If you have any questions about your container contact Tim Fredricks, Honey Show Chairperson, e-mail: t.jacks.mo@gmail.com.

CLASS: Entries in incorrect classes may be moved to the appropriate class by judges or disqualified. If you have any questions about your entry contact Tim Fredricks, Honey Show Chairperson, e-mail: t.jacks.mo@gmail.com.

RAFFLE: All entries* will be included in the conference raffle held during the convention. Proceeds of the raffle benefit Heartland Apicultural Society. All persons, including the entrants, are invited to participate in the raffle.

**Entrants in Class I and J – Bee Art/Craft have the option to reclaim their entries prior to the auction for a \$50.00 donation to Heartland Apiculture Society.*

Class Specific Descriptions

- HONEY:**
- Classes A-B:** 1-lb. Queenline-style or Classic-style glass jars. **(no labels affixed).**
- Class C:** 1-jar of extracted liquid honey (any size between 4-24 oz.), in which the outside of the jar is painted completely black **(no labels affixed).**
- Class D:** 1-lb. round chunk honey jar (has small shoulder) or straight cylinder glass jars with standard lids **(no labels affixed).**
- Class E:** Comb Section Honey: including Ross Rounds, square wooden sections, or cassette type with clear covers on both sides **(no labels affixed).**
- Class F:** approximately 4"x4" plastic cut comb boxes **(no labels affixed).**
- Class G:** 1-lb. round chunk honey jar (has small shoulder) or straight cylinder glass jars **(no labels affixed).**
- BEESWAX:**
- Class H:** Beeswax Candles - Entry may be a single candle, a pair, or a set of candles, which may be dipped, molded, or rolled sheets. **No non-beeswax enhancement is allowed.** Entry weight: ½ pound (8 ounces) to 2 lbs **(no labels affixed).**
- BEE ART/CRAFT:**
- Class I:** Bee Art – This category includes any type of art that includes bees as a primary component of the artwork. It can include a variety of techniques including, but not limited to, drawing, photography, painting, etc. Submitted items need to be the individual work of the entrant (i.e. picture taken by) and judges reserve the right to move items to Class J as appropriate or reject entries that do not meet class requirements **(no personal identifying marks).**
- Class J:** Bee Craft Item – This category includes any type of “hand-made” craft item that includes bees as a primary component of the work. It can include a variety of medias including, but not limited to, wood, leather, fiber, fabric, mosaic, clay, wax, etc. Submitted items need to be primarily crafted by the entrant (i.e. item can be “hand-made” with purchased supplies but does not include a purchased item that is decorated by the entrant) and judges reserve the right to move items to Class I as appropriate or reject entries that do not meet class requirements **(no personal identifying marks).**
- COOKING:**
- Class K:** Cookies/Bars with Honey – The purpose of this class is to showcase honey as the primary sweetener in your favorite cookie/bar recipe. Please provide at least 2 dozen (24) cookies/cut bars contained in unidentifiable disposable containers (will not be returned) and a printed copy of the recipe in simple black typeset **(no personal identifying marks).**
- LABELS:**
- Each entry should be **accompanied by enough labels** for each individual item in a class (e.g. 3 labels for Class A), which will be attached to the items after judging. Ordinary honey labels showing the name and address of the producer (entrant) are acceptable. All Classes require a label for each individual item submitted to fulfill Class requirements.

DO NOT AFFIX THE LABELS TO ENTRIES.

- JUDGING:** All entries will be judged according to the official score sheet. After the show, completed score sheets will be available at the front desk.
- AWARDS:**
- » Special awards will be presented for each 1st Place entry.
 - » 1st, 2nd, and 3rd Place entries will receive ribbons.
 - » If the judges determine that none of the entries in a class warrants a 1st Place, an award will not be presented.
 - » Entrant with the most accumulated points across all classes will be selected as the **“Grand Champion”** (must have entered at least five (5) classes).
 - » Awarded places receive: 1st = 3 pts, 2nd = 2 pts, and 3rd = 1 pt.
 - » All entries will be displayed at the conference starting around noon on Thursday July 12, 2018.
 - » Presentation of awards will be made during the Brews & Bees Event at Anheuser-Busch Brewery on Thursday night July 12, 2018.

Unsuccessfully Fighting Laying Workers

By Eric Tietze, MSBA Newsletter Editor

As a relatively new beekeeper with only two hives, starting 2018 successfully overwintering both hives was a welcome relief. As often happens with beekeeping, that feeling of success turned to struggle in quick order.

Both hives started the year with a healthy population and laying queens doing their jobs beautifully. Hive 1, the hive I originally started with, had a larger population of bees, more stores and were working away when the year began. Hive 2, a split from the first hive which then had to be requeened (another mistake to learn from, but that's another story) had a smaller population and only a single brood box without a lot of stores. However, both hives were strong and growing right out of the gate.

Suddenly the queen in Hive 1 went missing, which I didn't catch as quickly. This is where the mistake and the lesson really begins. By not catching the fact that the queen was no longer in the hive and laying soon enough, the hive began to have laying workers.

After much research and asking lots of questions, I decided to attempt an approach I had seen several say had been successful in their hives. I began pulling a frame of open brood from Hive 2 and placing it into

Hive 1 with the laying workers about once every 5 days. The theories I had read indicated the pheromones from the open brood would help to shut down the laying workers. After doing this for about 3-4 weeks, it is said that you should stop seeing evidence of laying workers, the bees should attempt to make, and be ready to accept, a new queen. My experience differed.

After about 4 weeks of this method the laying workers were laying even more furiously than before, and the other hive (Hive 2) had decided to supersede their queen. My personal belief is the bees saw the lower amount of open brood in their hive and decided their queen was not performing properly. In the end Hive 2 made a new queen and Hive 1 never accepted a new queen. I was able to split Hive 2 and now have two strong hives again.

One piece of advice I received in the beginning was to do a newspaper merge of the two hives. I didn't do this because I was fearful that Hive 2 wasn't strong enough to overcome the eventual influx of the new bees and I may end up with only one hive that now had laying workers and no way to fix it. I'm not sure if the newspaper merge would have been better or worse in the end.

Ambassador Update

By: Kyle Day, 2017 Missouri State Honey Ambassador

We have been busy as a Bee this month with the Ambassador program. This month I went to Harrisonville to teach OTS Queen Rearing at the Cass County Bee Club, it was a great meeting with a lot of discussions between beekeepers with all different levels of experience and great feedback from knowledgeable beekeepers. Then I was invited to the West Central Beekeeping Association and did a presentation on my years in the Beekeepers Suit. This is probably my favorite presentation because with a good supportive group behind them youth beekeepers can do great things. Coincidentally, we were lucky enough to have a 12-year-old boy in attendance. Him and his dad was in their first year of beekeeping together. It is great to see youth beekeepers becoming involved in beekeeping at a young age because they are the future of Missouri Beekeeping.

Next, I was able to work with Cathy Misko and other area beekeepers at Powell Gardens for Pollinator Week. We had people of all ages stop to talk to us about beekeeping and the importance of Honey Bees and other pollinators and handed out pollinator seed packets, pollinator

posters, and Honey Bee themed coloring books for the kids. It is always great to inform the public about how important pollinators are and how much some of them already know about beekeeping, and how much interest in beginning beekeeping there is. We held an impromptu beginning beekeeping class. Lastly this month I was invited back to the Ray County Library in my hometown to do a children's program. After a short program about beekeeping the children got to make a Honey Bee craft out of a toilet paper roll painted yellow, pipe cleaners, and old book pages for wings.

I hope everyone had a happy and safe Independence Day! I hope to see many of you at the Missouri State Fair or at the MSBA Fall Conference that's fast approaching. I am still available to attend or present at any events or meetings until October, start mid-August scheduling will only evenings and weekends do to my college schedule. This year I will be staying in the Kansas City Area for college and to expand my beekeeping operation, but we can do our best to make sure I am at any event you would like me to attend. For scheduling you can contact Amy Giffen at amygiffen@hotmail.com or through the MSBA website.

HAS Most Asked Questions

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5. What should I wear?

Casual business light summer clothes. I am also packing a light sweater just in case the lecture spaces are cooler. Wear comfortable shoes so you can easily get to the conference building sites, which are located near each other.

If you have any other questions, feel free to email me at msbacharlotte@gmail.com.

To date there are more than 400 attendees, almost double their average conference attendance numbers so this will be an excellent opportunity to meet a lot of Midwest

beekeepers as well as hear about the latest in beekeeping research. You will find a list of speakers here: <http://www.heartlandbees.org/2018-has-speakers/>

Don't forget the honey show, you can enter your honey in several categories including the Black Jar category, that's basically honey rated only on taste, which is why it is entered in a black jar. There are also categories for crafts, cooking and beeswax. Honey show rules and entry form are here: <http://www.heartlandbees.org/has-2018-honey-show/>

And what to call it? Try spelling "H-A-S" out as you say it, that's how they refer to themselves. See you in St. Louis!

Scientists Find Evidence of 27 New Viruses in Bees

Study represents largest effort to date to identify novel pathogens in global bee populations

By: Sara LaJeunesse, Penn State News

UNIVERSITY PARK, Pa. — An international team of researchers has discovered evidence of 27 previously unknown viruses in bees. The finding could help scientists design strategies to prevent the spread of viral pathogens among these important pollinators.

“Populations of bees around the world are declining, and viruses are known to contribute to these declines,” said David Galbraith, research scientist at Bristol Myers Squibb and a recent Penn State graduate. “Despite the importance of bees as pollinators of flowering plants in agricultural and natural landscapes and the importance of viruses to bee health, our understanding of bee viruses is surprisingly limited.”

To investigate viruses in bees, the team collected samples of DNA and RNA, which is responsible for the synthesis of proteins, from 12 bee species in nine countries across the world. Next, they developed a novel high-throughput sequencing technique that efficiently detected both previously identified and 27 never-seen-before viruses belonging to at least six new families in a single experiment. The results appear in the June 11, 2018, issue of *Scientific Reports*.

“Typically, researchers would have to develop labor-intensive molecular assays to test for the presence of specific viruses,” said Zachary Fuller, postdoctoral fellow at Columbia University and a recent Penn State graduate. “With our method, they can sequence all the viruses present in a sample without having any prior knowledge about what might be there.”

Fuller noted that because the cost of high-throughput sequencing continues to decrease, the team’s approach provides an inexpensive and efficient technique for other researchers to identify additional unknown viruses in bee populations around the world.

“Although our study nearly doubles the number of described bee-associated viruses, there are undoubtedly many more viruses yet to be uncovered, both in well-studied regions and in understudied countries,” he said.



The scientists developed a novel high-throughput sequencing technique that efficiently detected in bees both previously identified and 27 never-seen-before viruses belonging to at least six new families in a single experiment.

Image: Jeff Kerby / National Geographic Society

Among the new viruses the team identified was one that is similar to a virus that infects plants.

“It is possible that bees may acquire viruses from plants, and could then spread these viruses to other plants, posing a risk to agricultural crops,” said Christina Grozinger, distinguished professor of entomology and director of the Center for Pollinator Research at Penn State. “We need to do more experiments to see if the viruses are actively infecting the bees — because the viruses could be on the pollen they eat, but not directly infecting the bees — and then determine if they are having negative effects on the bees and crops. Some viruses may not cause symptoms or only cause symptoms if the bees are stressed in other ways.”

Beyond identifying the new viruses, the team also found that some of the viruses exist in multiple bee species — such as in honey bees and in bumble bees — suggesting that these viruses may freely circulate within different bee populations.

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Scientists find evidence of 27 new viruses in bees

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“This finding highlights the importance of monitoring bee populations brought into the United States due to the potential for these species to transmit viruses to local pollinator populations,” said Galbraith. “We have identified several novel viruses that can now be used in screening processes to monitor bee health across the world.”

According to Galbraith, the study represents the largest effort to identify novel pathogens in global bee samples and greatly expands our understanding of the diversity of viruses found in bee communities around the world.

“Our protocol has provided a foundation for future studies to continue to identify novel pathogens that infect global bee populations using an inexpensive method for the detection of novel viruses,” he said.

The National Geographic Society and the USDA Animal and Plant Health Inspection Service supported this research.

Other authors on the paper include David Galbraith, Allyson Ray, Maryann Frazier, J. Francisco Iturralde



To investigate viruses in bees, the team collected samples of DNA and RNA (single-stranded DNA) from 12 bee species in nine countries across the world.

Image: Jeff Kerby / National Geographic Society

Martinez, Harland Patch, Cristina Rosa, Joyce Sakamoto, Scott Stanley, Anthony Vaudo, and Christina Grozinger, Penn State; Zachary Fuller, Columbia University; Axel Brockmann, National Centre for Biological Sciences, India; Mary Gikungu, National Museums of Kenya; Karen Kapheim, Utah State University and Smithsonian Tropical Research Institute, Panama; Jeffrey Kerby, Dartmouth College; Sarah Kocher, Princeton University; Oleksiy Losyev, National University of Life and Environmental Sciences of Ukraine; and Elliud Muli, International Center of Insect Physiology and Ecology, Kenya.

The Trials of Making Increase, Part 2

By Ray Shadow, West Central Region Director

Things have been crazy... Just to recap I started the year with 8 hives and had a crazy goal of trying to go into the winter with 30 viable colonies. To get there I have tried OTS splits and I attempted grafting a few times. To put it nicely I have learned a LOT and am sitting at 23 queen right colonies and 22 boxes of bees that have the potential with either grafted queen cells or cells from OTS. Now its just waiting time to see how many make it back bred and start laying. I also wanted to switch over to all medium boxes, that wish was an abject failure, maybe next year.

I have always believed in the value of education and this year my attempts at increasing my hive counts have proven the value of learning. Each of the conversations I have had have taught me something, and when added to all of the mistakes I have made and tried to recover from this has been a very educational bee year for me. I was able to attend a queen rearing class this year. Our spring conference the speakers where great, but probably of equal value to me was the side conversation I was able to have with beekeepers from all over the state it's amazing how much good information experienced beekeepers are willing to give away for free. I have also been lucky enough this year to be able to get off my day job to attend H.A.S. in July. The biggest problem I am seeing with this event is that there needs to be about 3 of me to get to all of what I want to hear lots of great topics and I have heard great things about the speakers.

The Perfect Smoker Fuel?

By Gregg Hitchings, Southeast Region Director

The smoker is an essential tool for beekeepers. Sure, it's possible at times when conditions are perfect and the stars align to work very slowly and carefully without the use of smoke; this is easiest when checking nucs, smaller starter colonies and mating nucs. Generally, the larger the colony the more defensive behavior will be encountered. Those with bees can't always work under perfect conditions or slowly or only on hives with fewer bees, that's why a little puff or two of smoke can be oh so helpful.

The use of smoke provides two benefits. The smoke masks the alarm pheromone so it limits this type of communication among the bees. Additionally, it sets off an instinct which compels the workers to stock up on stores...suck up honey, perhaps in some sort of preparation in case abandonment of the hive is necessary. Workers, instead of reacting to your activities, get busy loading up, making working the hive much easier.

The type of fuel we use to feed our smoker is important and I've been in search of the perfect smoker fuel for decades. Everything I've used, and the list is substantial, has a drawback or two. We want a fuel which provides a cool, dense white smoke and we want it easy to light and hardy enough to keep burning so it is there when we need it. There is nothing more disconcerting than hearing the tone of the bees amping up and reaching for the smoker just to find after pumping the bellows several times... nothing.

Early May, I was assisting a new beekeeper in St. Francois County with inspections of his three hives. He was using crushed corn cobs for fuel and I was impressed not only with the smoke it provided but it's ability to recover with just one or two puffs after the smoker had been set aside for some time. He had found it at a local farm supply store being sold as animal bedding. Impressed, I immediately went shopping and bought a 40-pound bag for \$4.00. Crushed corn cobs have been my fuel now for a couple of months. It takes a wad of paper in the bottom to get



it properly lit but once that's done, you're in business for as long as you want to be. The smoke is dense and cool enough not to singe bee's wings if you are not paying attention and get the smoker too close. And talk about stubborn...in testing by setting a lit smoker aside, I've returned five hours later and revived the smoke with just a few puffs. The drawbacks? You'll notice a slight tendency to soot up. The soot can be reduced by immediately removing the lit contents and snuffing it out as soon as you no longer need it. It's the slow burnout process which feeds the soot problem. Also, you'll learn tipping the smoker forward to puff smoke deep between frames gives some of the smaller particles of crushed corncobs an opportunity to "escape." I've modified my approach and don't see this as much of a problem. I've also found it easier to add more fuel using a small scoop instead of my hands, less mess and less waste.

Could crushed corncobs be the perfect smoker fuel? I think so...at least until something more perfect comes along. Try it. You might agree.

Gregg Hitchings
MSBA SE Region Director

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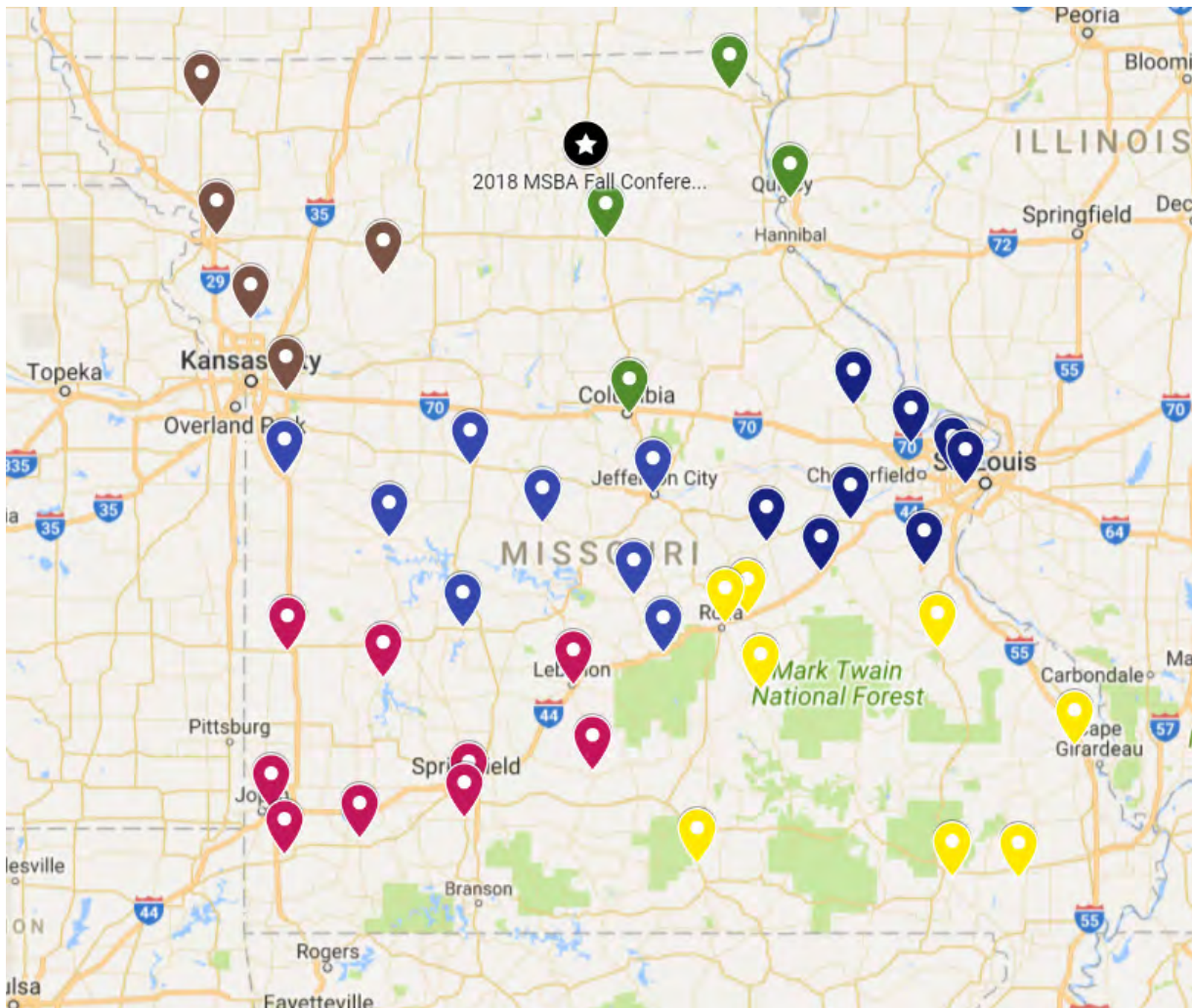
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Looking for a Local Club?



If you're a new beekeeper a local club will be invaluable to you.
If you're a seasoned veteran you'll be invaluable to a local club.

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mostatebeekeepers.org/local-clubs