

The Missouri State Beekeepers Association Brood



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Thank You MSBA Members

By: Kyle Day, West Central Region Director

When I started beekeeping in 2014 with a Youth Scholarship from Midwestern Beekeepers Association I never dreamed it would grow this big. I met and looked up to some of the best beekeepers in Missouri and knew I wanted it help others like they have helped me.

Over the years I helped beginner Beekeepers, taught at the Midwestern Beekeepers Beginner Class, and still write articles for their monthly newsletters, and at that point I thought was doing great as a kid still in high school. Then I moved on to college and moved to Springfield and attended Missouri State University and wasn't as hands-on involved with beekeeping. Then one day out of the blue I received an email about one of the best opportunities I have received. For the last year I traveled 3,500 miles around the state attending around 15 events not including continuing going to my local beekeeping meetings as the first Missouri Honey Ambassador. Over this time, I have met and interacted with beekeepers and the public from all over the state and have been able to help others while still increasing my personal beekeeping knowledge. Like I said during my speech



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**Mark Your Calendars for the MSBA Spring Conference!
March 15-16, 2019 in Cape Girardeau, Mo.**

From the President

by Clayton Lee

Wow! I thought the Fall Conference was a huge success!! Jerry Hayes, Dr. Juliana Rangel, and Dr. Judy Wu-Smart provided all attendees cutting edge information that we can use in our apiaries. I really appreciate their “practical application” explanations and look forward to applying new practices in my beekeeping.

We had several breakout sessions including Native Planting for Honey Bees & Pollinators, Queen Rearing Review, Marketing and Honey Sales at a commercial level, Cooking with Honey and Small-Scale Extracting, Bottling & Labeling. I didn't get to all of them, but I heard great reviews. One person told me it was worth their trip just to hear the Native Planting for Honey Bees & Pollinators.

I also thought our awards banquet was great! We had fifteen (15) past recipients of MSBA's Beekeeper of the Year (BOTY) attend!! We did our best to pay tribute to



their dedication going back to 1976. Great people doing great things!!

One of the last things we did at the Fall Conference was conduct a short business meeting. In that meeting, MSBA members elected a new President – Cory Stevens, Vice President – Ray Shadow, and a West Central Region Director – Kyle Day. Congrats to them!!!

I personally want to thank Bruce Snavelly and Wes Johnston for their many hours of work and leadership. They make our Conferences run smooth!!

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

August 22-23, 1905 Missouri State Beekeepers Association meeting in Sedalia (information taken from “The Progressive Bee-Keeper” Robert A. Holekamp, MSBA Secretary)

Paraphrased tidbits from the article:

George B. Ellis, Secretary of State Board of Agriculture, promised at the meeting to issue a bulletin on beekeeping... The bulletin was aimed at explaining the efforts of the Association was mailed to 1500 beekeepers.

A resolution was passed asking every member to form a beekeeping club in their own county to bring beekeepers in the vicinity closer in contact with each other. MSBA

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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
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A New Ambassador Takes the Reins

Meet our 2018-2019 Missouri Honey Youth Ambassador Hannah Gebhardt. Hannah is the daughter of Jeff and Robin Gebhardt of Salisbury. She is a senior at Salisbury High School. Hannah is the vice-president of her local FFA chapter, vice-president of the National Honor Society chapter, president of the Fellowship of Christian Athletes chapter and the manager of the high school softball team. After high school, Hannah is planning on attending college and majoring in elementary education.

Hannah started her adventure in beekeeping in the spring of 2015 as her FFA supervised agriculture experience project. With some research and guidance from a local beekeeper, Charles Lewis, and her grandfather, Sweet Hannah's Honey was founded. Hannah started with a horizontal hive and Italian bees and has grown to managing six hives (one horizontal, one top bar and four Langstroth).

We are pleased to have this talented young woman to represent the Missouri State Beekeepers Association. If you would like schedule Hannah to speak or attend your club or event, please contact Amy Giffen at amygiffen@hotmail.com.

From Simple Teenager to Ambassador to Director

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at the Ambassador Banquet, there are many beekeepers across this state I would consider family, and Dean Sanders would be that crazy uncle your parents only let you see a few times a year because they are afraid what he is going to teach you. Because of other beekeepers I was able to start beekeeping, I was able to help pass that on to others, and now with the guidance of some beekeepers this fall I moved home to continue my college career while expanding my personal apiaries and filling a couple local small pollination contracts and soon opening a small beekeeping supply store out of my home.

As of the MSBA Business meeting on the 20th, I'm now serving as the West Central Regional Director for the MSBA. I am excited for this opportunity and I am already working with Ray Shadow (Past West Central Director, now Vice President) to learn the ropes and have already emailed all the club contacts in the region. I will be planning to attend each local club at least 2 meetings per each year but hopefully it will be more! If you are within the West Central Region and would like to contact me you can do so at westcentraldir@mostatebeekeepers.org or mostatebeekeepers.org under the Executive Committee Tab.

Thank you, all Missouri Beekeepers. Many of you have helped me and have been great role models to look up to. I look forward to returning the favor to beekeepers and help new beekeepers. The MSBA Executive Committee is filled with great beekeepers from all around the state all working to help all Missouri Beekeepers. If you have any ideas or suggestions on what the MSBA could do better feel free to contact myself or any Executive Committee member.

History Tidbit

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Secretary Holekamp explained that they have already formed a club in the St. Louis area and this club has done much good for all its members.

There was a lengthy discussion on foulbrood at the meeting. One advantage of establishing local clubs is to spread the word about fighting foulbrood through early detection. Club members and bee inspectors were attempting to inspect all hives and treat them and eradicate foulbrood.

Holekamp closed the article with a note related to the upcoming national convention: "I wish to call attention to the national Convention which will take place Dec. 5, 6 and 7 in the Revere House, corner of Clark and Michigan Streets in Chicago during the fat stock show when exceedingly low rates may be secured on the railroad. Rates at the hotel are 75 cents for a room alone or 50 cents each where two occupy the same room."

Fall Conference Wouldn't Be A Success Without Lots of Great People

By: Bruce Snavelly, Conference Chairman

I love when the time for our spring or fall conference finally rolls around! After a year's worth of planning, numerous phone calls, emails, and committee meetings; when the conference is finally here – It's time to roll. Following our fall conference in Kirksville I want to especially thank some key people who helped pull this conference together. All are equally important!

I want to first thank our outgoing president Clayton Lee who received some weeks daily text and emails to help me sort details out and provide help with the meal planning and mail-in registrations. Then Wes Johnston kept a detailed spreadsheet on online registrations leading up to the conference and guided our registration table at Kirksville. Assisting Wes was Dan and Karen Lake, Wanda Johnston, and Charla Hinkle who helped at the Registration Table. Amy Giffin coordinated our Silent Auction and does a wonderful job directing the Ambassador Program. Diane and Eugene Mackovek make our Bee Café a wonderful area to interact with fellow beekeepers over a honey-snack. I love how they gave children an opportunity to color and be crafty around tables! I'm sure their parents appreciated Diane. A big Thank You goes to Erin Mullins for coordinating the Food and Craft Contest. She always does a superb job!

Tim Hyde put his expertise to work by managing the Vendor Hall area. Fitting over 12 vendors in the space at Truman State was no problem for Tim! Getting the vendors to the conference, unloaded, and set up is no small feat. And, let me add Becky Allen worked for several months behind the scenes to get information from our vendors. Thanks to Bernie Andrews because he always makes our Friday evening auction a fun experience to support our Youth Ambassador Program!

Gregg Hitchings once again put his camera to good use to record photo memories from our conference. And, Ray

Shadow used his skills to work to keep the sound and visual technology going in multiple rooms. Then last, but certainly not least, I want to thank our keynote speakers Jerry Hayes, Dr Juliana Rangel, and Dr Judy Wu-Smart for coming to our conference. In addition, our breakout speakers Jane Summe, Bill Allinder, Charlotte Wiggins, and Cliff Hollenbeck did an equally fantastic job. I heard many good comments! They all took time away from their families and very busy work responsibilities to get here. Dr Rangel shared some travel challenges with me, getting to Kirksville from St Louis on a small Cessna plane. It was her first trip in a small plane that made her gasp and say "Whoa!" when she first saw the plane, but it turned out to be a good flight. However her flight was canceled at the end of the conference and she had to ride a shuttle-bus back to the St Louis Airport and she left her phone on top of her rental car in Houston and it was ran over by at least 4 vehicles before trying to retrieve it.

Well our 2018 Fall Conference is in the record books and it's on to Southeast Missouri State University in Cape Girardeau, March 15 – 16 for our Spring Conference. Please look at the Conference Flyer for more details. There will also be breakout sessions involving Bernie Andrews speaking on setting up a sideline extraction house, Charlotte Wiggins will be back for a repeat Pollinator Planting presentation, Chef Bill Allinder is planning an extended version of Cooking with Honey (more details to follow), and Gregg Hitchings will give a talk on local club speaker development. See you in Cape!

Thanks everyone who contributed and everyone who attended our fall conference! Let's make our Spring Conference in Cape Girardeau a fun and educational beekeeping conference!

Bruce Snavelly

Conference Chairman

Awards, Thank You and Contest Winners!!

As with tradition, several MSBA members were recognized at the Fall Conference for their outstanding work and contributions to their fellow beekeepers.



Dean Sanders has been the MSBA cornerstone for the Missouri State Fair for many years!! For the last 12 years, Dean has been the State Fair Chair. This year, MSBA presented him with the Lifetime Achievement Award. Dean is also known for his countless hours of mentoring beginning beekeepers.

Erin Mullins was recognized as the State Fair Volunteer of the Year!! Erin volunteered two weeks at the Fair educating the youth and working at the MSBA booth. We continue to salute her for her nonstop support!!



Anna Johnson was selected as the 2018 Youth Beekeeper of the Year. "This young lady is an inspiration to all who crosses her path and has passed her beekeeping love and bravery to her younger sister to whom Anna supplied her too with a bee suit and hive tool."



Roger Wood received the MSBA Mentor of the Year Award. He has shared his knowledge through newsletter articles for both Midwestern Beekeepers Association and MSBA. Roger has personally mentored beekeepers of the Kansas City Area in his personal yard. Pictured is Roger (right) and Kyle Day, newly elected West Central Region Director.



Bob Williams was not able to attend the Fall Conference, but we caught up with him the next day at the Midwestern Beekeepers Association's meeting. Bob has a willingness to share his expertise and time to fellow beekeepers, especially the new ones. He fields many questions and you will often find him talking to someone about beekeeping or stopping by to help someone out. Bob has been an active member of the MSBA and has used his position as Midwestern Beekeepers Association president to promote events. He has worked in the State Fair Booth as well as entering items to be judged. Congrats to Bob!! Photo below (left to right): Clayton Lee, Kyle Day, Bob Williams, and Roger Nichols.



A very special “thank you” was given to Diane Makovec. Diane has been the leader of the Beehive Café at our Conferences and that is no small task. Her wonderful personality makes everyone feel at home and her fantastic energy makes the Café a great place to stop, snack and visit.



Beekeepers of the Years

It was a very special moment to salute the past Beekeepers of the Years. Fifteen (15) were able to attend and we consider these folks our All Stars in beekeeping!! We continue to thank them for all they have done and will do in the future.

Back row (left to right): Neal Bergman-1999, Dean Sanders-2007, Roger Nichols-1996, Art Gelder-2002, Jim Duever-2009, Ken Norman-2008, Eugene Makovec 2006 & 2015.

Front row (left to right): Charlotte Ekker-Wiggins-2015, Steve Moeller-2013, Ron Vivian-1995, Cathy Misko-2015, Vera Gelder-2002, Val Duever-2009, Erin Mullins-2016, Bruce Snavelly-2015.

Fall Conference Contest Winners:

Cooking with Honey:

- Cookies/Candy: 1st Place Corinne Collins
- Bread: 1st Place Corinne Collins
- Cake/Pie: 1st Place Gina Draker

Photography: 1st place Dr. Leo Sharashkin

Arts & Crafts: 1st Place Dr. Leo Sharashkin

Peoples Choice:

- Cookies & Bread: Corinne Collins
- Cake/Pie: Gina Draker
- Photography: Corinne Collins
- Arts & Crafts: Doreen West



We didn't capture a picture of all the winners, but above are a few. Left to right: Dr. Leo Sharashkin, Corinne Collins and John West.

Congratulations to HAS 2018 Honey Show and Raffle Winners!



Thank you for attending Heartland Apicultural Society's annual conference at Washington University in Saint Louis July 11-13, 2018. If you have any comments or suggestions for next year, please let us know.

Mark Your Calendars for July 11-13, 2019 – Planning is underway for HAS 2019 in Tennessee. Possible venues are being identified and will be shared as soon as they are final. Mark your calendars for July 11-13, 2019 and keep up with HAS updates by signing up for emails.

HAS is a non-profit corporation focused on bringing beekeepers the latest scientific beekeeping research, beginning beekeeping classes and advanced beekeeping classes at an annual conference that rotates every year through the midwest.

Congratulations to the HAS 2018 Honey Show Winners!

Class A (Light/Amber liquid honey) was separated by the judges into 3 categories based on the color of the entries.

Class A – Extra Light Amber Honey

- 1st Place – Cyndree Moriarty – Hawthorn Woods, IL
- 2nd Place – Fran Davidson – New Carlisle, OH
- 3rd Place – Kevin McBride – Mooresville, IN

Class A – Light Amber Honey

- 1st Place – Kim Kostelac – Fairview Heights, IL
- 2nd Place – Matt Doucette – Bowling Green, KY

Class A – Amber Honey

- 1st Place – Not awarded
- 2nd Place – Myrn Teal – Newburgh, IN
- 3rd Place – Frank Moriarty – Hawthorn Woods, IL

Class C – Black Jar

- 1st Place – Karen Belli – Old Mill Creek, IL
- 2nd Place – Frank Moriarty – Hawthorn Woods, IL
- 3rd Place – Matt Doucette – Bowling Green, KY
- 4th Place – Daniel Schmehl – Durham, NC

Class E – Comb Section Honey

- 1st Place – Not Awarded
- 2nd Place – Kim Kostelac – Fairview Heights, IL

Class G – Creamed Honey

- 1st Place – Not Awarded
- 2nd Place – Sam Alston – Atlanta, GA

Class H – Beeswax Candles was separated by the judges into 2 distinct categories based on the design of the entries.

Class H – Tamper Candles

- 1st Place – Karen Belli – Old Mill Creek, IL

Class H – Artistic Candles

- 1st Place – Laurel Duffy – Danville, IN

Class I – Bee Art

- 1st Place – Myrn Teal – Newburgh, IN

Thank you to HAS 2018 Conference Sponsors: Bayer, US • Betterbee • Crop Life • Dadant & Sons, Inc. Eastern Mo. Beekeepers Assoc. • Field Watch • Giofre Apiaries • Isabees, LLC • Kentucky State Beekeepers Assoc. Mann Lake • Missouri State Beekeepers Assoc. • Monsanto • Syngenta, LLC • The Beekeepers of Indiana US Canola Association • Veto-Pharma • Vita-Europe • Wicwas Press

The Times...My How They've Changed!

By: Gregg Hitchings, MSBA Southeast Regional Director

On the MSBA website's homepage there is a section for "History Buffs". If you check it out you'll be able to find archived newsletters of MSBA's activities going back about forty years. If you made it to the Fall Conference in Kirksville this year I encourage you to check out the newsletter of September, 1978. It will take you back to a simpler place and time.

I was thinking about that particular MSBA newsletter while participating in the fall conference this year. It was promoting the upcoming fall conference for 1978... Where? Well, in the Student Union of the College on Randolph Street in Kirksville, sound familiar? Also, the content of the program offered was interesting. The two main speakers offered programs entitled "A Closer Look at the Honey Bee" and "What the Better Beekeeper Should Know and Do". Members attending the conference were encouraged to participate with the following comment: "There will be time and space for those who have any equipment, pictures, samples, display items or anything else of interest to beekeepers. Demonstrations and displays add a great deal of interest and we encourage you to bring anything you might have to SHOW AND TELL." This was a decade before Varroa had made it to this country, long before we knew pesticide residues build up in comb and many beekeepers were still proud of that really old black comb they had been using for years and years. Yes, it was a simpler time.

The truth is our conferences now stress what beekeepers need to know TODAY so there is a beekeeping tomorrow. This information disseminated out to commercial beekeepers, sideliners and hobbyists must be science based. MSBA addressed this concept very well at this year's conference by bringing together some of the top bee people in the country with some of the best and latest information to share.

What beekeeper today doesn't recognize the name of Jerry Hayes? Jerry is internationally respected within the beekeeping community for his almost four decades of promoting sustainable beekeeping. He was at ground zero in Florida when varroa emerged on the radar and



Dr. Wu-Smart (Left), Dr. Juliana Rangel and Jerry Hayes taking questions from MSBA members.

he shared with us at our conference some of what it was like for him and others who were suddenly faced with this challenge. Jerry also spoke of so many initiatives and entities involved now with bee science and the continual search for information which will help us keep healthy hives. A strong supporter of the Bee Informed Partnership, Jerry reported on some of the findings regarding their latest annual beekeeper survey results. If you would like to review this information check out: <https://beeinformed.org/>.

Dr. Judy Wu-Smart, Extension and Research Entomologist for the University of Nebraska at Lincoln, reported on extensive research regarding the buildup of chemical residues in honey bee comb. These residues, whether from agricultural chemicals utilized by farmers or miticides used by beekeepers, seem to be having an effect on colony health in ways not previously considered. Dr. Wu-Smart discussed the findings which showed residues of different chemicals, even when detected in very low numbers, may have interactions negative towards brood rearing. For instance, it was shown these interactions may result in delayed pupae development which may lead to slightly increased reproductive success of the varroa mite. One of the main take-aways for me from Dr. Wu-Smart's presentation was to be more committed to culling old

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How To Start A Missouri Master Pollinator Steward Program

By: Charlotte Ekker Wiggins, East Central Regional Director

Interested in helping pollinators, including honeybees? There is a brand new program in Missouri designed to do just that. Your local bee club can sponsor the program, get programming for half a year and generate revenue for club operations.

The Missouri Master Pollinator Steward Program officially launched fall of 2018. The six-session program is designed to teach participants about pollinators, why they are important and what participants can do to help them.

Local bee clubs can work with their local University of Missouri Extension offices to request the program in their area; to get class participants registered and to host the sessions, which include hands on activities.

The suggested cost of the program is \$90 per person. The recommendation is that \$25 goes back to the local bee club; another \$25 is a required University of Missouri state fee. The remainder (\$40) is used to cover expenses like printing and supplies, and any surplus kept by that local extension office. "Details of how funds will be dispersed is part of the discussion a bee club should have with their respective county extension center council," according to Jim Quinn, University of Missouri Extension specialist and steering committee member.

For the past three years, the University of Missouri has sponsored a steering committee to develop a Master Pollinator Steward program for the state. The purpose of the program was to capture those 9 out of 10 people who want to help pollinators but don't want to keep honeybees, the largest of the pollinator groups.

Lack of plant diversity and poor nutrition sources is one of the three major challenges to keeping bees alive worldwide.

"It's been exciting to see this program evolve and to take it out for a test in May," said former Missouri State Beekeepers Association President Valerie Duever, another working group member. "The president and steering



A honeybee packing pollen visits a New England Aster in my Rolla, Mo., garden.

committee member. "This program should be a great resource for local bee clubs and other groups interested in helping to restore Missouri's foraging areas."

Other steering committee members include Travis Harper and Bob Pierce, MU Extension specialists; Mike Conroy, Sedalia Beekeeping Association; Jim Duever, Boone Regional Beekeeping Association; Bob Lee, Master Naturalist representative; Amber Edwards, Conservationist educator, and

Charlotte Ekker Wiggins, Master gardener.

Missouri State Beekeepers Association endorsed the general concept for this program October 2015.

For more information on Missouri's master pollinator steward program, visit <https://bit.ly/2Plqxu1>

Guidelines on how to set up a Master Pollinator Steward program class are here: <https://bit.ly/2T3xjCU>

A narrated overview of the program that can be used to share it has been posted here: <https://bit.ly/2zJEMhX>

For more information, contact Jim Quinn at quinnja@missouri.edu.

Education... Why Bother?

By Ray Shadow, MSBA Vice President

We just had our fall conference in Kirksville and it was another great opportunity to hear the latest information from the experts. As I am sure others will write about we had some great speakers again this year and they all had good information but we only get to see them in person a few times a year so what do you do to keep current the rest of the time.

Many of us have to earn these things called continuing education units (CEU's) to keep certifications or even to stay employed and it's not that different with bees. You may not get fired if you don't learn the new methods or about new treatment options but you may lose a few more hives or get a little less honey and that can be annoying. So how do I earn my beekeeping CEU's? Lots of things actually, I'm lazy and have realized that the more I know often leads to having to work less or at least being able to work more efficiently and causing myself less problems. One thing I do is to read, I read online and watch videos and subscribe to Bee Journal. Admittedly I am behind on reading all my issues but will get caught up this winter. There are a LOT of beekeeping books and with the ability to self-publish more books will become available. Most local libraries have access to beekeeping books, even if they have to borrow them from other libraries.

Next, I go to bee meetings when ever I can and I do not just go to mine I try to hit others as well some of these are quite a drive. We are looking at some options that

MSBA can use to help local clubs advertise their schedule of topics and have some resources for those meetings where they need speakers or materials, if you would like to participate contact me or Gregg Hitchings.

And I talk to beekeepers, I heard comments that some wanted to know who the people were that had been keeping bees forever so they would know who to talk to. To me that is the wrong way to look at it. I talk to everyone and apply what I read and hear from other sources then use that to make my own decisions. A master beekeeper that lives 200 miles north or south of me may know a lot but they won't be able to tell me about my specific area. The beekeeper that's been doing it a few years but lives 5 miles away will be able to help me more in some cases.

Find the method that works best for you and then do it, learning more is never a bad thing. The problems I see are those that blindly follow advice because they have a lot of posts on Facebook or a lot of YouTube followers, those guys may know a lot or they may just be good on camera and at marketing themselves. Finally, share, help your local clubs, volunteer to teach topics, you do not have to be the expert on a topic just tell your audience your experience and when you get to parts that you know you are a little weak on involve your audience, they will usually be happy to provide input.

"Once you stop learning you start dying" - Albert Einstein

Learn from One Another Every Day

While you can learn a ton of wonderful information at the Spring and Fall Conference, by attending field days and meetings hosted by your local beekeeping club and other events throughout the year, you don't have to wait on these events to learn. One of the great things about social media is that it allows people with common interests to talk and learn from one another at any time of any day.

MSBA, as well as most local bee clubs, have active Facebook pages which are a great place to turn when

you encounter a problem in your hive or if you run across something you think would be helpful to others.

If you haven't already, be sure to search for and follow the MSBA Facebook page as well as your local club pages. It's a great place for information and getting to know the beekeepers in your area.

<https://www.facebook.com/groups/msbainfo/>

Review: Beetle Buster Base Boards

By Mike Immer

The following is an independent product review and represents the experiences and opinions of the author, this does not necessarily reflect the opinions or experiences of MSBA nor does it constitute a recommendation by MSBA to either purchase or not purchase the product being reviewed. MSBA welcomes independent reviews of beekeeping equipment from our members.

This is different than a screened bottom. It's different than an 'in hive' beetle trap. It's different than a slatted rack. It's kind of a combination of things, which explains some of the price tag.

Can you imagine paying roughly a hundred bucks for a bottom board? Probably not.

But by the time you add up all of the other accouterments you currently use to deal with small hive beetles (SHB), you may be CLOSE to the same price by the time you calculate time spent, etc.

So, if you run screened or solid bottom boards, you probably pay around twenty bucks for a nice one (assembled) or you might make your own for \$7-\$10. You might also spend money and time on little disposable plastic oil or diatomaceous earth traps that you have to poke in-between the frames, wad/tear up 'swiffer' or microfiber sheets, make sign board and roach killer baits, CD case traps, or simply play a game of "whack a beetle" every time you remove a top, or an inner cover, etc.

Instead of fumbling oils, accidentally killing a batch of bees with a diatomaceous earth spill (oops, dropped it and poof...powdery explosion) or using other harsh chemicals, and even better than "sunning" your frames (possibly warping and destroying wax and foundation in the process), littering the landscape and land fills with disposable traps, sheets, and cracked CD cases and sign material, you could stop madly smashing the nasty critters, and install one of these Beetle Buster base boards.

Here's how they work:

The base board uses a white corrugated fiberglass or plastic bottom that is drilled out for with a number of studied and measured holes, precisely big enough for FEMALE SHB to get herded through (those are the big ones that don't go through your normal screen bottoms), as well as the smaller males and juveniles etc. The white color is intentional, and helps the bees SEE the hive beetles better, making it easier for the bees to herd them into the holes There is also a

shim around the top edges (where the hive body sits) of the bottom board that inhibits the beetle's from climbing up into the brood nest, honey, and pollen stores.

Note: You might think that SHB only go for the pollen, and honey, but you would be wrong! You might also think that strong hives=no SHB. You'd also be wrong! Even the "put your hives in direct sun" advice is falling short as SHB continue to multiply and adapt. Short of living in an area that makes it difficult for SHB to pupate, they can and will overwhelm a strong colony.)

Across the bottom of the entrance area of the board is a gap under a ridge that is specifically designed to direct the landing and always invading SHB under it, and then down below the previously described corrugated bottom (white and with the holes) and out/under that bottom board.

Guess what's down below all of that stuff?

A TRAP! A TRAY of DEATH for hive beetles (and the occasional stray bee/ant/etc.) that get herded by the bees and redirected from their landing at the entrance into it. It's a tray that slides in and out from the back that should be sprinkled (lightly) with a very thin "fluffed up" layer of diatomaceous earth.

Yes, that's right, the same bee killing stuff you might put in a trap inside the hive body, but in this case, it is below the bottom board, away from the bees. (Yes, you could probably modify it with an oil tray if you wanted, but the diatomaceous earth seems to work pretty well.)

So, what should you expect to find in this tray of insect destruction? Probably nothing right away. In fact, the recommended way to use this beetle buster board is to put it in place (it comes in 8 and 10 frame langstroth sizes) add the diatomaceous earth, slide in the tray, and then go through the hive, removing any visible hive beetles by hand (crushing them of course) before leaving the hive be.

You can actually "flick" the beetles off, with the faith that when they try to return to the hive, they will fall into the

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Times Have Changed

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combs from my hives. That's a major change for a guy who years ago valued those old combs as long as they were straight. Not only is it good practice considering the pathogens they may contain but also the chemicals we understand are absorbed into the wax.

With an annual loss nationwide of about 40% of our colonies, it's important we beekeepers get better at replacing these losses with the healthiest and most productive bees possible. Dr. Juliana Rangel, Associate Professor in the Department of Entomology at Texas A&M University presented on, among other things, the need for high quality healthy queens and considerations for their production. She also provided in-depth information regarding queen physiology, need for high quality drones and honey bee mating behavior.

Dr. Rangel, Dr. Wu-Smart and Jerry Hayes all served on a panel to take questions from the conference attendees. There was a good give and take on current issues. What I really appreciated about these three speakers, although they might be looked upon as "rock stars" of the beekeeping community, they didn't hide backstage at half-time. All made themselves available during breaks to address attendees and their questions on an individual, personal level.

MSBA's Program Director, Bruce Snavely, deserves kudos for his ability to bring some of the top bee professionals and researchers in the nation to Missouri to share their knowledge with our members.

Beetle Buster Review

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new trap. Some prefer to do this as it is simpler and faster, and easier on the comb. However, if you have multiple hives in a yard and only a couple of these bottom boards, there is a high likelihood that the beetles will fly into another hive anyway.

Over the course of a week or two, you'll notice hive beetles, dead in the tray, and in dwindling numbers, until you realize that there are either none, or there are so few that they could be flying in and landing during your inspections. Something else noticed...mites. The mites that fall into the diatomaceous earth appear to be dying as well, as you can see them peppering the tray.

By far, the biggest, most immediate difference I saw was when I combined this bottom board with the thermal treatment device (more on this in another review). It seemed the thermal treatment device ALSO killed SHB and had the added benefit (and intent) of killing mites (Varroa and tracheal). Using both resulted in a welcome carnage!

Beetles were running out of the hive, in broad daylight, into the sun, to escape the heat. They were falling down, right along with the SHB, onto the thermal treatment

board. Once the thermal treatment board was removed, the mites continued to drop, as did the beetles.

And the bees? They just happily swept and herded the debris and remaining beetles (if there were any) through the holes in the baseboard, where they settled into the diatomaceous earth, for an untimely death.

Remember, the only good hive beetle, is a dead hive beetle. And since they spread and travel at night, and fly into ANY entrances they can find and navigate, the best way to keep them dead is to route them straight into the trap below the bottom board, close or screen all other entrances, and make it easy for the bees to detect and herd those that do make it in, through the holes and into the trap.

In summary, if a more environmentally and bee friendly way to care for your hives is appealing to you, and requires less effort on your part, you might like these bottom boards. For all of you commercial and sideliners guys out there? It probably won't scale very well AND your probably running pallets anyway. So, let's let the backyard beekeepers, and hobbyists try them and decide if they like them before you go 'blowing up' this review!

Sunflower Pollen Seems To Cause Real Problems For *Nosema Ceranae*. That's Good.

By: Alan Harman, *BeeCulture.com*, <https://bit.ly/2OEKFT3>

A new study offers hope for a relatively simple mechanism to promote bee health and well-being – give them access to sunflowers.

The study by researchers at North Carolina State University and the University of Massachusetts Amherst shows two different species of bees fed a diet of sunflower pollen had dramatically lower rates of infection by specific pathogens.

Bumble bees on the sunflower diet also had generally better colony health than bees fed on diets of other flower pollens.

The study found sunflower pollen reduced infection by the pathogen *Crithidia bombi* in bumble bees (*Bombus impatiens*).

Sunflower pollen also protected European honey bees (*Apis mellifera*) from *Nosema ceranae*.

These pathogens have been implicated in slowing bee colony growth rates and increasing bee death.

The study also showed a deleterious effect, however, as honey bees on the sunflower diet had mortality rates roughly equivalent to honey bees not fed a pollen diet and four times higher than honey bees fed buckwheat pollen.

This mortality effect was not observed in bumble bees.

Jonathan Giacomini, a Ph.D. student in applied ecology at NC State, said bees already seem adept at collecting sunflower pollen.

Annually, some two million acres in the United States and 10 million acres in Europe are devoted to sunflowers, he said, making sunflower pollen a ready and relevant bee food.

“We’ve tried other monofloral pollens, or pollens coming from one flower, but we seem to have hit the jackpot with sunflower pollen,” said Rebecca Irwin, a professor of



Honey bees fed a diet of sunflower pollen show dramatically lower rates of infection by a specific pathogen.
(Photo: Jonathan Giacomini, NC State University)

applied ecology at NC State. “None of the others we’ve studied have had this consistent positive effect on bumble bee health.”

Irwin said sunflower pollen is low in protein and some amino acids, so it should not be considered as a standalone meal for bee populations.

“But sunflower could be a good addition to a diverse wildflower population for bees,” she said, “especially generalists like bumble bees and honey bees.”

The NC State researchers are planning to follow up on the study to examine whether other species of bees show the positive effects of sunflower pollen and to gauge the mechanism behind the mostly positive effects of sunflower pollen.

“We don’t know if sunflower pollen is helping the host bees fight off pathogens or if sunflower pollen does something to the pathogens,” Irwin said.

ApisProtect Teams up with Two St. Louis Businesses to Perfect Hive Health Monitor

St. Louis, Missouri – October 16, 2018, ApisProtect will have its principal executives in St. Louis on October 18th to begin the USA science validation phase of its previous published work in the use of IoT technology and machine learning for the improvement of honeybee health.

The roll out in St. Louis will involve 24/7 monitoring of 15 honeybee hives across three area apiaries managed by St. Louis County's Isabee's, including hives at Missouri Botanical Garden. At the Garden, the monitored hives are located across from the Kemper Center for Home Gardening, in the fruit garden. The monitoring will involve the ApisMonitor in-hive device installed by ApisProtect with bee health assessments and data provided by the National Agricultural Genotyping Center (NAGC), headquartered in Creve Coeur. Validation is expected to run through June, 2019.

ApisProtect has committed to installing their device in 200 hives across the world for testing and development of this new monitoring technology, utilizing IoT enabled sensors and machine learning. According to ApisProtect's Andrew Wood, "The goal is to provide beekeepers with important information when it's difficult to inspect, say at night, during poor weather or when hives are a distance away. The information they receive will allow them to respond quicker to possible health concerns and be positioned to make more effective decisions. The economic impact we are looking for will provide cost savings for pollination services, improve honey production, and better prevent colony loss for beekeepers worldwide."

ApisProtect is an Irish company, located in County Cork and headed up by Dr. Fiona Edwards Murphy, Andrew Wood and Dr. Padraig Whelan, a team with diverse backgrounds including engineering, scientific, beekeeping

and commercial experience. Dr. Edwards Murphy has a PhD in Electrical Engineering and founded ApisProtect after receiving her BE from University College Cork in 2013. This project has received international recognition, including at least eight academic publications, awards from the Irish Research Council, IBM, The Irish Laboratory

Awards, and Google. ApisProtect was partially funded by St. Louis-based agtech accelerator The Yield Lab in 2016.

Isabee's is a home-grown business founded by Jane Sueme in 2009, currently housed in St. Louis County Economic Development's VentureWorks business incubator in Lemay. Isabee's is a unique, full-service beekeeping equipment supplier, providing bee stock, education and hive management services to the area's 4,000+ beekeepers. Isabee's will provide communications to ApisProtect and facilitate sampling for bee health analysis to NAGC during this testing period.

National Agricultural Genotyping Center, headquartered in Creve Coeur and staffed by Pete Snyder, President and CEO with laboratories in Fargo, ND is a 501(c)5 corporation serving private and public scientists, from breeders to quality control and food safety researchers. NAGC was established in 2016 under a partnership of The National Corn Growers Association and Los Alamos National Laboratory.

The United States commercial apiculture industry currently manages 2.6 million hives to pollinate over 90 different crops, creating a multi-billion dollar honeybee industry, the world's largest.

For more information: Andrew Wood, ApisProtect, +353 (0)87 364 9711, andrew@apisprotect.com; Jane Sueme, Isabees, LLC, 314-504-4424, jane@isabees.com; Pete Snyder, NAGC, 314-942-3282, pete@genotypingcenter.com



Dr. Fiona Edwards Murphy

MSBA SPRING CONFERENCE

SOUTHEAST MISSOURI STATE UNIVERSITY

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FEATURED SPEAKERS



Dr. Kirsten Traynor of Flickerwood Apiary, an avid beekeeper, scientist, and editor of American Bee Journal. She has travelled the globe in a beeline, seeking out the best beekeepers, bee breeders and scientists. Her current research on pesticide impacts on bee health, along with her keen understanding of the top-notch bee science, make her an excellent speaker. Her presentations cover complex information in simple terms, making it easy for any audience to understand manner. She integrates a touch of humor with incredible detail and easy, practical management advice.



Zac Lamas is a PhD candidate at the University of Maryland. He studies mite feeding and does pesticide research on honey bees. Prior to joining the lab, Zac worked for Michael Palmer in Saint Albans, Vermont where he managed colonies for honey production and made nucleus colonies. While Zac worked for French Hill Apiaries he also ran a few hundred migratory hives between North Carolina and upstate New York. He is most focused on beekeeping management, and best practices for productive colonies and low overwintering mortality. Zac continues to be a contributor to the American Bee Journal.



Bob Finck worked as a Food Chemist for Allen Foods. Married 49 years, two married daughters, two twin grandchildren. Started beekeeping in 1980 and joined the Eastern MO Beekeepers Assn. Immediately became "passionate" about honeybees. Beekeeping for 48 years. Has won 85 ribbons (40 (Blue) with honey and beeswax entries at the Missouri State Fair. Served two five-year terms as EMBA president. Enjoys helping new beekeepers overcome their problems and issues. Friday & Saturday.

March 15-16, 2019 (Friday & Saturday)



MISSOURI STATE BEEKEEPERS ASSOCIATION

FOR INFO: BRUCESNAVELY@HOTMAIL.COM

All MSBA Information You Need Is Available By Visiting Our Website

Missouri Beekeepers Association Executive Directors

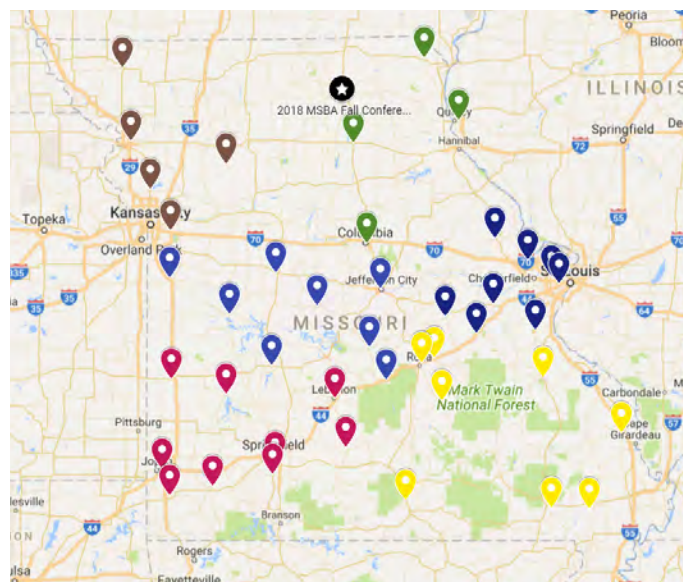
Find The Current List of Directors and Contact Information By Visiting Our Website

mostatebeekeepers.org/executive-committee

Looking for a Local Club?

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



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