Catch The Buzz

Memphis Area Beekeepers Association www.memphisbeekeepers.com
P.O. Box 38028, Germantown, TN 38138
Meeting Location: 7777 Walnut Grove Rd # C, Memphis, TN 38120

MEETING DATE & TIME: March 11, 2019 at 7 pm – Andrew Fogg from Dadant (Frankfort, KY branch) will bring MABA an overview of spring hive health and the steps you can take to ensure healthy hives and excellent honey crops. Be prepared to learn, and then use that knowledge in your bee hives to keep your bees healthy. See y'all there!

Also, you can save 5% and get your Dadant order delivered to this meeting if you place your order ahead of time. Just mention you are with MABA for the 5% discount and that the order should be delivered for the March 11, 2019 MABA meeting. Call 888-932-3268 to place you order now with the Dadant, Frankfort, KY branch, no later than Thursday or Friday before the meeting.

If you need a mentor, please let us know! If you can and want to be a mentor please let us know, sharing is rewarding! **Sign up to be a mentor!**

Stay tuned for MABA field days, we will post these on this website, as well as on Facebook and Twitter!

MARCH AND THE BEES

- March, a warm month in the Shelby County Area, the lengthening days and new pollen and nectar sources stimulate brood rearing. As days lengthen and temps increase, the cluster expands and drones are produced. With an increase in brood rearing and increase in adult bees**, the nest area of the colony becomes crowded.** More bees are evident at the entrance of the nest. Give the queen room by removing some honey-bound frames or adding an extra box. The queen needs the space to build up for the nectar flow.

- The bees also gather water to regulate temperature and to liquefy thick or granulated honey in the preparation of brood food. Remember, **the colony expands rapidly in March**, with an increase in both young and field-worker bees. This is the critical time for starvation. The worker bees are beginning to forage and drones begin to appear. As the days grow longer, the Queen increases her rate of egg production and colonies wishing to swarm may start to raise swarm cells and colonies with failing queens may start supersedure cells. These will hatch in 16 days.

- Weather permitting, a few early swarms could occur in March. Manage for swarming by moving the box on top down to the bottom board if the bees are in two boxes or manipulate the frames by removing brood frames from the center and adding empty drawn comb or new wax foundation to the brood chamber. Food stores are being consumed at a rapid rate. Natural Pollen is coming in rapidly but cold, windy weather can affect nectar sources so a close watch on food stores is critical.

- Regardless of its condition, crowded or not the colony will try to expand by building new combs if food and room are available. These new combs are used for the storage of honey, whereas the older combs are used for pollen storage and brood rearing.

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MARCH AND THE BEEKEEPER

- Get your equipment ready.
- Inspect your hive(s)! when the temperature is 50 degrees or higher, look in the hive and pull out a few frames.
- Remove the entrance reducer and clean the bottom board as it may be filled with dead, winter bees.
- Assess how many of your colonies have died out over the winter.
- Clean out these boxes and freeze the comb if you can. This will prevent the spread of wax moths
- Feed your bees or they will starve until they can bring in enough nectar and pollen. Feed sugar syrup mixture, sugar or patties. Remove the patties by Mid-March to prevent infestations of hive beetles.
- Check honey stores prepare to Re-queen failing Queens, order queens, remove all medicines as specified on the labels.
- Manage for swarming
- Attend Bee Meetings

2/26/2019 National Honey Board Report: https://usda.mannlib.cornell.edu/usda/ams/FVMHONEY.pdf

TENNESSEE: Overall reported losses so far this year have been low. However the rollercoaster temperatures may increase the losses to beekeepers that are not checking the stores. This type of weather tends to deplete the stores rapidly. Beekeepers have been reporting some pollen and nectar coming into their colonies. There has been some dandelion, maple, and henbit reportedly blooming sporadically in some areas.

ARKANSAS: No report issued.

MISSISSIPPI: The bees are reported to be in fairly good shape after a rainy wet and cold month. Feeding is still required in most areas and the bees are managing to get out and pick up pollen from Red Maple, Hen Bit, Wild Mustard and a few other wildflowers as weather permits. Prices remain steady.

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BEEKEEPING READING LIST

Varroa Destructor Feeds Primarily On Honey Bee Fat Body Tissue And Not Hemolymph

https://www.pnas.org/content/116/5/1792

An image showing a cross section of a *varroa* mite feeding on a honey bee's abdominal cavity is one of several ARS microscopy images changing what we know about how mites damage honey bees.

ARS Microscopy Research Helps Unravel the Workings of a Major Honey Bee Pest

By Dennis O'Brien
January 29, 2019

Research by scientists at the Agricultural Research Service (ARS) and the University of Maryland released today sheds new light -- and reverses decades of scientific dogma -- regarding a honey bee pest (*Varroa destructor*) that is considered the greatest single driver of the global honey bee colony losses. Managed honey bee colonies add at least $15 billion to the value of U.S. agriculture each year through increased yields and superior quality harvests.

The microscopy images are part of a major study showing that the *Varroa* mite (*Varroa destructor*) feeds on the honey bee's fat body tissue (an organ similar to the human liver) rather than on its "blood," (or hemolymph). This discovery holds broad implications for controlling the pest in honey bee colonies.

The study was published on-line Jan. 15 and in today's print edition of the *Proceedings of the National Academy of Sciences*. An image produced by the ARS Electron and Confocal Microscopy Unit in Beltsville, Maryland is on the cover of today's journal.

Varroa mites have been widely thought to feed on the hemolymph, of honey bees (*Apis mellifera*) because of studies conducted in the 1970's which used outdated technology. But today's collaborative study, by University of Maryland and ARS researchers at the ARS Electron and Confocal Microscopy Unit, offers proof of the mite's true feeding behavior. Through the use of electron microscopy, the researchers were able to locate feeding wounds on the bee caused by the mites, which were located directly above the bee's fat body tissue.

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The images represent the first direct evidence that *Varroa* mites feed on adult bees, not just the larvae and pupae.

In addition, University of Maryland researchers conducted feeding studies and found that *Varroa* mites that were fed a diet of fat body tissue survived significantly longer and produced more eggs than mites fed hemolymph. The results show, mites fed a hemolymph-only diet were comparable to those that were starved. Thus, proving conclusively that the *Varroa* mite feeds primarily on the fat body consumed from bees.

The results are expected to help scientists develop more effective pesticides and other treatments to help bees cope with a mite known to spread at least five viruses. They also help explain why *Varroa* mites have such detrimental effects on honey bees, weakening their immune systems, and making it harder for them to store protein from pollen and survive through the winter.

The study was part of the Ph.D. thesis of Samuel D. Ramsey from the University of Maryland and was conducted in collaboration with ARS researchers and study co-authors Gary Bauchan, Connor Gulbronson, Joseph Mowery, and Ronald Ochoa.

The study can be found at https://www.pnas.org/content/116/5/1792.

The Agricultural Research Service is the U.S. Department of Agriculture's chief scientific in-house research agency. Daily, ARS focuses on solutions to agricultural problems affecting America. Each dollar invested in agricultural research results in $20 of economic impact.

Read or heard of good, science-based beekeeping articles? Please let us know, we will get them into the MABA newsletter.

UNIT HONEY PRICES BY MONTH

Retail-Average Retail Price per Pound across all reporting regions - Data from https://www.honey.com/honey-industry/statistics/retail-honey-price used with permission. Based upon average price across all reporting regions. Assumes various sizes sold at the same rate.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2019	$7.28	$7.54										
2018	$7.57	$7.22	$7.34	$7.28	$7.03	$7.23	$7.37	$7.41	$7.17	$7.34	$7.51	$7.46

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Average Wholesale Case Price Per Pound across All Reporting Regions. Data from https://www.honey.com/honey-industry/statistics/wholesale-honey-price used with permission. Based upon average price across all reporting regions. Assumes various sizes sold at the same rate.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2019	$4.16	$4.32										
2018	$5.30	$5.18	$5.22	$5.31	$5.21	$5.31	$5.12	$5.42	$5.24	$5.26	$5.42	$5.44

UPCOMING EVENTS

Plan now for National Honey Bee Day 2019, which is Saturday August 17, 2019

March 21-23, 2019 – The 2019 Honey Convention returns, this time to Fountainhead College of Technology in Knoxville, TN! Look forward to 18 great speakers and 70+ classes to attend! Lectures. Networking. Workshops. Classes. Vendors. Food. Door Prizes. Auction. If it's about beekeeping it will be there!!

April 8, 2019 – MABA April 2019 Meeting – Wanna learn more about swarms and splits? You will be in the right place during this meeting! Dena Hodge, Robert Hodum, and Sammy Mardis will present their "do's" and "don't's" for successful swarm captures and colony splits. See y'all there!

May 13, 2019 – MABA May 2019 Meeting – Speakers and Subject coming soon!

June 10, 2019 – MABA June 2019 Meeting – Dr. Jeffrey Harris, Mississippi State University Associate Extension/Research Professor, will return to MABA for a practical, fact-filled presentation for beekeepers of all experience levels. You'll be sorry if you miss this meeting!

July 8, 2019 – MABA July 2019 Meeting – Speakers and Subject coming soon!

July 10-12, 2019 – Heartland Apicultural Society 2019 meeting in Nashville, TN! HAS 2019 will be hosted by Belmont University. With 6 keynote speakers and 24 more great speakers this meeting will have everything you need at any level of beekeeping. Registration and more details forthcoming.

Need containers? If you need glass jars or plastic honey bears please contact Robert Hodum, 901-603-6492.

To learn more about beekeeping in Tennessee visit the Tennessee Beekeepers Association website at: http://www.tnbeekeepers.org/

SEE YOU AT THE MARCH MABA MEETING, VISIT WITH YOUR MENTOR. If you need a mentor, please let us know! If you can and want to be a mentor please let us know, sharing is rewarding! **Sign up to be a mentor!**

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HONEY-BASED RECIPES

1. **DIY HONEY NUT PUFFED CEREAL**: Makes about 2.5 quarts of cereal clusters

INGREDIENTS	**DIRECTIONS**
4 1/2 cups - puffed rice 1 cup - sliced almonds 1 1/4 tsp. - ground tumeric 1/2 tsp. - cinnamon 1/3 tsp. - kosher salt 1/4 cup - light brown sugar, lightly packed 2 T + 1 tsp. (32g) - unsalted butter 1/3 cup - honey 1/2 tsp. - baking soda 1 T - raw sesame seeds	Heat the oven to 325°F. Line a rimmed baking sheet with parchment and set aside. In a large heatproof bowl, combine the puffed rice, almonds, turmeric, cinnamon and salt. In a small pot, stirring occasionally, heat the brown sugar, butter and honey, until they have been simmering in slow, steady large bubbles for 1 - 2 minutes (roughly 250°F). Remove from heat and whisk in the baking soda. Immediately pour the mixture over the dry ingredients. Stir well with a wood spoon, making sure to mix in all the spices and seeds that have fallen to the bottom of the bowl, and then spread the mixture on the prepared baking sheet. Bake for 15 minutes, stirring halfway through. Allow to cool completely at room temperature. Break the pieces and place into an airtight container to store. Serve with your milk of choice, which will become "Golden Milk" when mixed with the cereal! *Recipe courtesy of Chef Jessica Koslow, made for the National Honey Board* **TIP** Instead of puffed rice, you can substitute other puffed grains like millet.

To subscribe to the National Honey board newsletter visit: https://www.honey.com/signup