



Catch The Buzz

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Memphis Area Beekeepers Association www.memphisbeekeepers.com
4852 Waycross Ave, Millington, TN 38053
Meeting Location: 7777 Walnut Grove Rd # C, Memphis, TN 38120

MEETING DATE & TIME: August 13, 2018 – [MABA August 2018 Meeting](#) – Mike Harris from Logan’s Lake Honey, and our very own Jerry Murphy, Stuart Hooser, and Huff Peeler, will present “Inspection for and alternative treatment methods for Varroa destructor mites.” Be prepared to learn, and then use that knowledge in your bee hives to keep your bees healthy. See y’all there!

Is it time to harvest your honey? Contact Bob Haskett, email: RHas4852@aol.com, phone: 901-872-0074

AUGUST - THE BEES AND THE BEEKEEPER

- August is harvesting time. Harvest your honey and carefully check your bees.
- Remember August is also a time to check for Varroa mite inspections.
- If doing splits August should be the last, early August and the split may build up before winter.
- Remember as Nectar flows run out there may be a need to feed the bees. Re-queening now is good if you can find mated queens.
- It is a time to make plans for feeding in the fall and find sources of feed in case the fall flow does not come in.
- Filter and bottle your honey in preparation for honey sales and shows.

7/26/2018 National Honey Board Report: <https://usda.mannlib.cornell.edu/usda/ams/FVMHONEY.pdf>

TENNESSEE: No report issued.

ARKANSAS: No report issued.

MISSISSIPPI: Volume of honey is considered decent to average this year. Beekeepers are gathering honey and will be checking to see if treatments will be needed as they look into the hives and observe the bees. June was hot and dry in many areas and some had plenty of moisture and rain. Prices remain strong and about steady. Honey priced \$1.90 - \$2.00 per pound.



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BEEKEEPING READING LIST

Symbionts in the Honey Nest

<https://americanbeejournal.com/category/columns/for-the-love-of-bees-and-beekeeping/>

July 1, 2018 - Keith Delaplane - (excerpt)

By now, readers of this column know that the honey bee colony is an assemblage of individuals, organized to a greater or lesser degree by genetic kinship, yet behaviorally specialized and integrated to optimize survival and reproduction of the group. Numerous times in this column we have drawn metaphors between organs, tissues, and behaviors in a metazoan organism, such as ourselves, and the corresponding behavioral castes in a honey bee colony. We can, for instance, see parallels in the decision-making process between a human brain deciding which car to buy and a honey bee swarm deciding which cavity to move into.

We have learned that new properties emerge out of the action of large groups when individuals in the group are free to make independent reactions to local stimuli. In this manner, for example, colony-level temperature regulation is the sum action of each individual bee shivering, clustering more tightly, or clustering more loosely in an attempt to find her “comfort zone.” The sum of everyone’s comfort zones adds up to the cluster surviving winter.

Similarly, the choice of nest cavity, the foraging for propolis, guarding behavior, and the allocation of foraging tasks to the oldest worker cohorts correspond to colony-level immune responses that limit the entry of nest enemies. And the chaotic construction of new comb by nectar-engorged bees results in the repeating parallel beeswax combs that provide square meters of texturally-rich substrate on which the daily drama of brood rearing, honey storage, and social interactions can play out.

All of this comprises a complex biological entity we call the honey bee superorganism, with biotic components (the bees) and abiotic (the cavity and beeswax combs), a reproductively autonomous Darwinian unit of selection, environmentally stable, proven and refined by natural selection to be an effective vehicle for transmitting down the generations the bundle of genes we call *Apis mellifera*.

The nest of a highly social insect can be so environmentally stable, both as a structural shelter and an oasis of optimum temperature and humidity, that it has been called “a factory in a fortress,¹” the “factory” referring to the production of a worker force which in turn procures the energetic resources to sustain the colony’s reproduction, and the “fortress” in the case of the honey bee referring to the hollow cavities that scout bees seek out and appraise for their optimal volumes, insulative properties, and defensibility.

These hollows are usually in trees, range from 30-60 liters in volume, and have small entrances. Once bees occupy them the workers scrape away the dead soft wood, coat the sound wood and interior cavity walls with a propolis envelop, then proceed to build up to 3 m² of parallel combs.² This is the “skeleton,” if you will, of the honey bee superorganism, the substrate on which the bees through behavioral means regulate temperature and humidity for optimum living conditions. These cavities are then, by direct behavioral extension, rendered into ideal environments for insect adult life and immature development.



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Other species think so too. In honey bees as with many other highly social insects, there are tenants in the house – whole bestiariums of organisms³ who live in the same nest, benefiting from the safe harborage, and making a living off the bees or nest detritus. Such close relationships between different species are called *symbioses*, and within that label the relationships can range from *parasitic* (one species benefits at the expense of the other), to *commensal* (one benefits, the other is not harmed), to *mutualistic* (each benefits). Additionally, these categories can be further categorized as *obligate* (the relationship is exclusive and necessary to at least one of the parties) to *facultative* (one or both can enter or leave the relationship as opportunity permits).

It is helpful to never forget that genes are inherently selfish and that natural selection rewards, without bias or impartiality, on the basis of one criterion only – whatever works. And “working” in this case means whatever heritable characters promote the survival and transmittal of the genes that code for them.

It’s easy to read cold-hearted selfishness in a parasite that takes the life of its host, but even the most benign of mutualists is playing by the same rules – only in this case, cooperation with its symbiotic partner has proven to be the best strategy for transmitting its genes. Once the calculus of gene transmittal tips in a different direction, the mutualist will be quick to adapt – on purely selfish grounds. So, when we talk about symbionts, it’s good to remember that these categories are, in the words of Hughes et al., “a continuum of costs and benefits with parasitism at one end and mutualism at the other.”⁴

Many authors have observed that large social insect colonies are like miniature ecosystems with layers of species and multi-trophic interactions similar to that observed in human scale terrestrial ecosystems. The same laws of ecology apply, so that, for example, whether it’s a social insect colony or a hedgerow in England, the number of species living in either ecosystem tends to increase with increasing size and age of the ecosystem. Large, long-lived, and stable systems tend to “collect” species over geologic time, many of which species may enter into symbiotic relationships with others, thus further enlarging and complicating the relationship webs. In the ants and termites, we find the largest number, diversity, and complexity of nest symbionts – and for these very reasons: large size, long life, and stability. With virtually infinite space, the subterranean nests of ants and termites become diffuse and vast, a feature that encourages the evolution of secondary reproductives and large populations. Their nests include examples of sophisticated animal architecture, such as heat chimneys, that maintain favorable microclimates for insect nurseries and fungus gardens grown by the insects for food – among the most remarkable examples of symbiotic coevolution known in biology. Their highly diversified and numerous soldier castes provide waves of defensive protection, and in some species the reproductive pair live their post-dispersal lives protected in hardened mud bunkers deep in the nest.

In the end, these contrived habitats generate positive feedback loops that further perpetuate large populations, long colony life, and stability. These same conditions render complex social nests virtually predator free – yet another positive reinforcement, as life history theory predicts that low predation pressures encourage selection for long life.⁵ Is it any wonder that opportunistic species would evolve mechanisms to escape detection, to invade, to colonize, and to integrate into these attractive “fortress factories?”

And, reflecting on a recurring theme of these columns, yet again we see how features of the honey bee superorganism are recapitulated in the evolution of free-living organisms such as ourselves, so that by studying them we learn about us. For just as the honey bee superorganism has picked up symbionts in its long natural history, so too has our own lineage of *Homo sapiens*. There are “nest invaders” in our bodies, tenant species



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who run the gamut of parasitic (hookworms) to commensal (hair follicle mites) to mutualist (an array of microbiota essential to normal human physiology).⁶ And, whether in the honey bee superorganism or human organism, these symbionts have themselves shaped the evolution of their hosts. We could not be what we are without our symbionts.

The convergences between organisms and superorganisms are instructive for understanding...

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
2018	\$7.57	\$7.22	\$7.34	\$7.28	\$7.03	\$7.23						
2017	\$7.35	\$6.99	\$6.85	\$7.04	\$7.06	\$7.25	\$7.05	\$7.26	\$7.27	\$7.37	\$7.18	\$7.25
2016	\$6.74	\$6.91	\$6.79	\$6.79	\$6.72	\$7.12	\$7.01	\$6.88	\$6.88	\$7.12	\$7.04	\$7.39

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
2018	\$5.30	\$5.18	\$5.22	\$5.31	\$5.21	\$5.31						
2017	\$5.25	\$5.32	\$5.38	\$5.27	\$5.13	\$5.46	\$5.39	\$5.35	\$5.44	\$5.27	\$5.19	\$5.31
2016	\$5.04	\$5.15	\$5.04	\$5.20	\$4.97	\$5.19	\$5.09	\$5.01	\$5.10	\$5.31	\$5.27	\$5.39

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

Plan now for National Honey Bee Day 2018, which is Saturday August 18, 2018



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September 8-9, 2018 – [The Germantown Festival – Honey Sales!](#)

October 12-14, 2018 – [The Pink Palace Crafts Fair](#)

Think about Volunteering to teach and sell honey at the upcoming festivals in September and October. We'll need help unloading, selling, demonstrating, and teaching the public about beekeeping, we hope to see you there!

Contact Bob Whitworth if you would like to sign up to volunteer, bgw92143@hotmail.com or 901-569-3560.

September 10, 2018 – [MABA September 2018 Meeting](#) – Mike Studer, Tennessee State Apiarist, will present the state of beekeeping in TN and how to keep our bees healthy and thriving. You will want to attend this meeting!

September 11, 2018, 4PM – 10PM – TN Apiary Inspector Course – Mike Studer, Tennessee State Apiarist, will teach willing beekeepers the material necessary to take and pass the TN Apiary Inspector test, which will grant those individuals with the legal ability to inspect bee colonies and equipment for sale or transport within the state of Tennessee. Get ready for 6 hours of intense learning!

September 11, 2018, 8AM – 4PM – [Second Annual Fall Beekeeping Conference at the Agricenter in Memphis, TN](#)

Welcome back for the Second Annual Fall Beekeeping Conference at the Agricenter! We are pleased to have excellent speakers that will discuss their successes (and failures), for practical use in our apiaries. This is an all-day meeting, with many sessions, the agenda is forthcoming with the specific topics to be covered. This meeting will be helpful whether you are a seasoned beekeeper or don't have a hive yet.

Please print out the registration form, fill it out, and bring it with you, along with your \$20 registration fee to the September 22, 2018 Second Annual Fall Beekeeping Conference at the Agricenter in Memphis, TN.

The scheduled speakers are:

- 1) Dr. Leo Sharashkin - known for his natural beekeeping methods and use of [horizontal hives](#) (Layens and long Langstroths), along with innovative swarm trapping. His presentations will have many talking about colony health.
- 2) Charlie Parton - [Parton Apiaries](#) began 36 years ago in Maryville Tennessee with two hives, and has grown to an operation which runs 80 plus colonies. He is immediate past President for Tennessee Beekeepers Association (TBA) and past East TN Regional Vice President. Charlie was selected as TBA's Beekeeper of the



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year in 2011 and the TBA Life Member in 2013. He is active in the Blount County Beekeepers Association serving in several capacities including two terms as president.

3) [Jennifer Berry](#) - Apicultural Research Professional and Lab Manager for the University of Georgia Honey Bee Program. Her research objectives have focused on improving honey bee health, the sub-lethal effects of pesticides on beneficial insects and IPM techniques for varroa and small hive beetle control.

See y'all there!

October 12-13, 2018 - The **2018 Tennessee Beekeepers Association Fall Conference** will be held at the [Hyder Burks Pavilion at Tennessee Tech](#) in Cookeville. More details coming, but plan for a couple of fun- and fact-filled days!

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

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

SEE YOU AT THE AUGUST MABA MEETING, VISIT WITH YOUR MENTOR.

It's hot out there, drink plenty of water when you are working your bees!



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HONEY-BASED RECIPES

1. HONEY-BACON BLT: Makes 4 sandwiches

INGREDIENTS

12 slices - thick-cut bacon
1/4 cup - honey
1/2 tsp. - ground coriander
3/4 tsp. - cayenne pepper
8 slices - Sourdough bread, toasted
8 tsp. - mayonnaise
8 pieces - green leaf lettuce
12 slices - Beefsteak tomato, sliced
4 - eggs, fried to desired doneness
1/2 cup - Avocado, mashed

DIRECTIONS

Preheat oven to 400° and line a baking sheet with parchment paper. Place bacon slices on prepared baking sheet.

Combine honey, coriander, and cayenne pepper. In increments of 20 seconds, heat in microwave until just melted.

Using a pastry brush, baste melted spiced honey over bacon slices. Flip and baste other side.

Roast for about 15 minutes until crisp (may be a bit shorter or longer depending on fattiness).

To Assemble:

- On one slice sourdough toast, spread 2 tsp. mayonnaise.
- Top with 2 pieces green leaf lettuce, 3 slices tomato, 3 slices Spicy Honey Candied Bacon, and 1 fried egg.
- Spread 2 T avocado mash on second slice sourdough toast and place on top of sandwich to close.
- Slice diagonally, serve.

RECIPE VIDEO

Click [here](#) to watch how easy this recipe is to make!