Letter From The Editor

Hi Gang,

I would like to extend my deepest apologies for the tardiness of this newsletter. As you all know I’m sure, late spring and summer is the busiest time of year for beekeepers. Add that to regular life and preparation for my journey to EAS to take the master beekeeper exam, I was unable to get the newsletter out any earlier. Please think of this as a brief summer re-cap and plan to see another newsletter in late September as I get back to the bi-monthly routine.

I would also like to encourage you to get involved. RIBA is run by a group of dedicated volunteers. We are always looking for more help, whether it’s manning a booth at a fair, adding your name to the mentor list, joining a committee or contributing to the newsletter. Come to an executive board meeting and see what’s going on. All are invited as well as encouraged to participate.

This is YOUR club! The more people involved, the better it will be. This includes “new-bees”.

In the meantime, please enjoy some updates and brief re-caps of the June meeting, field day and EAS.

-Cynthia Holt
Update from the Queen Yard

As initially reported in the February/March issue of the newsletter (http://ribeekeeper.org/wp-content/uploads/2013/12/RIBA-newsletter-Feb_March-2017.pdf), the RIBA Queen Yard is now a member of the Bee Informed Partnership’s “Sentinel Apiary” program. Since May, we have been submitting monthly samples of bees from eight colonies at the Queen Yard to the University of Maryland to monitor levels of varroa and nosema ceranae. Unsurprisingly, early season varroa levels have been nonexistent for the most part, with only a single hive reaching a questionable level (2.2 mites per 100 bees) in June. I say “questionable level” because BIP recommends 5 mites per 100 bees as their threshold for treatment, while we at the Queen Yard have typically used a much more conservative 2 mite per 100 bees as our threshold. That hive was in the middle of requeening itself after a swarm (more on that later), so we chose not to apply a treatment at that time, so as not to potentially interrupt the requeening process. We are taking the July samples today (July 16) and will do our own mite counts as a control against BIP’s, just to see if there is any variation.

Nosema counts on the other hand showed treatable levels in 7 out of 8 hives in May! This came as a complete surprise to us as there were no outward symptoms and hives seemed to be building normally. Thankfully, June’s test results showed all but 2 colonies had almost completely eradicated the infection. Our conjecture is that the early high levels were a result of the extreme wet weather early in the spring, combined with a lack of ventilation, and hives located in an abnormally damp yard. We essentially took a wait and see approach, guessing that warmer, dryer weather would sort out the problem, but we also did some routine maintenance that is reported to help (requeening a number of hives, swapping out old comb, increasing ventilation etc).

The hive scale, and its numerous probes, is the other facet of the Sentinel Apiary program. The scale, manufactured by Arnia, transmits hive weight, brood temperature, ambient temperature, humidity, and several aspects of hive activity, including flights and fanning. This info can then be accessed through our cell phones, tablets, or computers, through a graphic interface that updates daily. We’ve only collected about six weeks of data so far, but already we have seen some very interesting results. We’re still really just learning how to interpret the data and how it can best be of use to RIBA, but the potential we’ve seen is really exciting.
The first graph above, shows the brood temperature from the end of May till July 16. The brood temperature probe is a wire inserted inside the hive and hung between two frames in the brood nest. It may need to be moved from time to time, as we discovered.

- **Note 1:** Brood temperature had been holding steady at 35°C, but this hive swarmed on June 5. By around June 12 the brood temperature started getting a bit more erratic, likely as the old brood hatched out and was not replaced.

- **Note 2:** Here the temperature gets quite erratic. They are no longer regulating the temperature in the vicinity of the probe, either because it has all hatched, or the brood nest has moved away from the probe.

- **Note 3:** After waiting long enough for the hive the requeen itself after the swarm and still not seeing a change in the brood temp, we decided to investigate. The hive successfully requeued and there was brood, but located in the outermost frames, away from the probe in the center of the hive. We moved frames to relocate the brood nest in a more central location and since then the brood temperature has held steady right around 35°C.
The next graph shows both brood temperature and ambient temperature. This ability to view two or more functions on the same graph is a very powerful tool.

- **Note 4:** This erratic area again shows the period before we relocated the probe. The green line represents the brood temperature while the blue line represents the ambient temperature. As you can see, the hive is always a bit warmer, but essentially mirrors outside conditions when they aren’t regulating temperature for brood rearing.

- **Note 5:** Here is where we repositioned the probe to be within the brood nest. This is a really great visual example of what a tremendous job the bees do of regulating temperature within the brood nest. Brood temp hovers right around 35C, all day and night, while the outside temperature fluctuates.
How did we know this hive had swarmed in the first place? The next graph gave us that answer. It shows the hive weight from May 28 to June 10.

Note 6: This sudden drop of over 3kg equates to a bit over 7lbs. Losing that much weight in one day could only mean one thing: a swarm. When we checked the hive there were so many bees still in it was hard to believe it could have swarmed, but the scale data was inescapable. The next week we found the virgin queen on the comb.

Stay tuned for further updates as we learn more!

Scott Langlais
Curried Honey Sweet Potato Soup

2-1/4 lb sweet potatoes, peeled and cut into 1-in chunks
4 tbsp oil
1 tbsp curry powder
2 tbsp honey
1 clove garlic, peeled and crushed
1-in piece ginger, finely chopped or micro planed
1 fresh red chili, seeded and finely chopped OR
1 t of crushed red pepper
1 red onion, peeled and finely chopped
4 cups vegetable stock
1/4 cup coconut milk
Salt and black pepper
4 tbsp Greek yogurt
1 tsp chili powder
Black pepper, freshly ground
2 tsp Honey

1. Preheat the oven to 375 degrees F and place a heavy baking sheet in the middle of the oven to heat.
2. In a large bowl, toss the sweet potatoes with 2 tablespoons of the oil, the curry powder and honey, and stir to coat the sweet potato pieces.
3. Stir in the garlic, ginger and chili.
4. Spread the sweet potatoes and the flavored oil and spices on the hot baking sheet and roast for 15 minutes.
5. Turn the sweet potatoes once, cook for 10 to 15 minutes, until they are soft, then cool.
6. Meanwhile, heat the remaining 2 tablespoons oil in a skillet and add the onion; cook over low heat for 20 minutes, or until the onion is soft and translucent.
7. Transfer the cooked onion and the sweet potatoes, along with the sticky contents of the baking sheet, into a food processor and add half the stock. Process until well combined.
8. Add the remaining stock and the coconut milk, pulse again until smooth, and return the soup to a clean saucepan. Season to taste with salt and pepper and gently reheat the soup.
9. Serve bowls and top each bowl with 1 tablespoon yogurt, a pinch of chili powder, a grind of black pepper, and a drizzle of honey.
Good News!

Through Ian Shepherd’s efforts at organizing the smoker contest at the RIBA Field Day on July 17, 2017, RIBA was able to donate $735.00 to Special Olympics of Rhode Island. Thank you Ian for organizing such a fun event and thank you to everyone who participated and donated!!

See the July recap for highlights from the smoker contest.
Meeting Re-cap June

The weather turned out to be beautiful for the first outdoor meeting which was held at Snake Den park in Johnston.

RIBA president Keith Salisbury gave an alcohol wash demonstration for new beekeepers during the “new-bee” meeting that took place before the general meeting. The general meeting consisted of an open discussion of what’s been going on in beehives around the state. People’s hives are doing well, although queen issues and nosema were brought up as concerns. Scott Langlais gave a brief talk about what’s happening in the RIBA queen yard and Dr. Jane Dennison gave everyone updates on the USDA queen grant.

Betty Mencucci led a hive demonstration and although the bees were slightly ornery, refreshments were enjoyed and a good time was had by all.
Meeting Re-cap July

July 15th was the date of the 3rd Annual RIBA Field Day, held at Salisbury Farm in Johnston, RI. As always, this event was free and open to the public. A brief introduction and business meeting was followed by multiple talks and demonstrations given simultaneously so attendees had a choice of where they would like to go. RIBA's new Flow Hive (donated by Flow) was on display for the first time and generated a lot of curiosity.

Evelyn Sayles, (University of Montana master beekeeper), gave an informative and well attended talk about Nosema and Nosema sampling. She also brought a microscope and demonstrated how to take a sample and diagnose Nosema under a microscope. An outline of her discussion can be found here:


Betty Mencucci was on hand to give a demonstration on how to extract honey.
The smoker contest, run by Ian Shepherd, was a highlight of the day’s festivities. Entrants were asked to make a donation to Special Olympics RI, provide their own fuel and light their smoker using the matches provided. The smoker to last the longest was deemed the winner. Keith Salisbury won the contest, with Cindy Holt and Scott Langlais coming in for second and third place respectively. During the announcement for the winner, Keith graciously gave his prize, a gift certificate, to Ian Shepherd for all of his hard work in organizing and running the event. All proceeds from the contest were donated to Special Olympics RI.

A presentation on planting for bees was given by Master Gardener, Jamie Nash and a Slovenian hive demonstration was given by Rebecca Dolan.
Hive demonstrations were conducted by Ed Karle (EAS Master Beekeeper), Scott Langlais and Cindy Holt.

During the final field inspection of the day, Scott Langlais noted apparent signs of disease in the hive under observation. Symptoms exhibited were an extremely spotty brood pattern, discolored and twisted larvae, and perforated cappings. No foul smell was noted, nor did the dying larvae rope out. Cindy Holt and Ed Karle consulted on the diagnosis, which visually appeared to be either European Foulbrood or Parasitic Mite Syndrome. Luckily, Cindy had a test kit for EFB in her car and when sampled, the hive tested positive for EFB. (Note: State Bee Inspector Jim Lawson was notified of the result and the hive was treated at a later date with Terramycin. All other hives in the yard were inspected the day after Field Day by Keith, Ed, and Scott. One other hive showed symptoms of EFB, though was not formally tested, and was also treated with Terramycin.)
What’s Happening?

Upcoming Meetings and Events

E-Board Meetings
Tuesday Sept 5th 6:30
Tuesday Oct 3rd 6:30
Tuesday Nov 7th 6:30
Warwick Public Library
600 Sandy Ln, Warwick
Open to all RIBA members

General Membership Meetings
Sunday August 27th 2017
2pm-4pm
House of Ned and Harriet Dwyer
7 Monkey Wrench Lane, Bristol RI
Guest Speaker: Wayne Andrews

Sunday September 17th
1pm-1:45p NewBee Discussion
2pm-4pm General Meeting
Location TBA

Mark Your Calendars!!!!

September 9-16
2017 North American Mite-a-Thon

Please commit to sampling your colonies for varroa during this time period using your preferred method of sampling. (sugar or alcohol). Afterwards, you can add your counts to the national database at:


For more info, please check out the website at

http://www.pollinator.org/miteathon
The 2017 annual meeting of the Eastern Apicultural Society took place July 31 to August 4th, at the University of Delaware in Newark, DE. The event is split into two portions: Monday and Tuesday is the short course, featuring workshops and talks that are geared a bit more toward beginners/practical beekeeping. Wednesday to Friday is the conference, with daily keynote speakers and more advanced topics generally. There is a wide variety of options each day, with five different speakers during each of four time slots. It’s a unique opportunity to immerse yourself completely in BEES for a week, meet other beekeepers from all over the world, and interact with some of the most famous names in bee research and popular writing. We personally spoke with beekeepers from Ontario, Illinois, Maryland, New York, Washington DC, New Zealand, Vermont, Delaware, and more. There are also rooms full of vendors, daily field trips, an on-site apiary, a large honey/mead/photography/etc show, and other special events.

Continuing a trend from last year, we noticed a significant emphasis on bee nutrition, particularly regarding pollen. Beyond just protein, pollen is also a source of vitamins, minerals, lipids, and sterols. Jay Evans (Beltsville Bee Lab, MD) noted ongoing research into amino acid supplements to boost vitellogenin levels and improve bee longevity. He also mentioned a possible supplement to boost immunity to nosema, and noted that reishi and amadou mushroom extracts appear to show promise in reducing viral loads. Several speakers noted incidentally that European Foulbrood appears to be on the rise. Data presented from the Beltsville Bee Lab in MD backed...
For the first time, Emily Langlais submitted three photos to the honey show. She won a first place ribbon in the close-up/macro category, fourth place in scenic, fourth place in portrait, and the American Bee Journal/Dadant Silver Award for Photography, the top prize for the photo category! Other RI accomplishments for the week include Cindy Holt passing three of the four grueling exams needed for the EAS Master Beekeeper certification, Betty Mennucci winning “Bee Jeopardy,” Ed Karle presenting multiple talks during the short course, and Dr Jane Dennison acting as RIBA’s EAS Representative.

Speakers we saw include Jay Evans, Jennifer Berry, Bart Smith, Paul Kelly (twice), Ramesh Sagili, Mike Palmer, Tom Seeley, Dewey Caron, Clarence Collison, Marla Spivak (twice), Karla Eisen, Chris Cripps, Maryann Frazier, and Jim Tew. Most of these names will be well known to you as the authors of some of the most well-respected works on beekeeping, monthly columnists in Bee Culture magazine, and the leading researchers working today. All were available to answer questions and take comments. Many also were gracious enough to sign copies of their books and take photos with the attendees.
Some quick facts we gleaned from EAS that you may not have known:

- American Foulbrood scales fluoresce under blacklight.
- There are believed to be as many as 18 bee viruses.
- Small hive beetle larvae won’t “pop” when squeezed (but wax moth larvae will).
- The earliest you can possibly have a naturally raised queen after a sudden queen death is 10 days (though she almost certainly will NOT be a quality queen).
- Excessive “sculpturing” of queen cells is a measure of the amount of care the larva/cell received.
- Aggressive behavior is largely inherited from drones.
- There is a positive correlation between the weight of a queen and the number of ovarioles she possesses. Also, heavier queens are better accepted by the workers.
- Drones laid in worker size cells probably indicates a queen running out of sperm.
- The sour smell that sometimes accompanies EFB is actually caused by a co-infection (paenibacillus alvei).

-Scott Langlais