The Shore Swarm

The Newsletter for Members and Friends of the Beekeepers Guild of the Eastern Shore November, 2019 bgesva.org

Dear Members,

This is a special edition of the Shore Swarm, featuring writing by our own Bettina Dembek, who traveled to Montreal this summer to attend the Apimondia Conference. Enjoy reading about this fantastic gathering of beekeepers from around the world. Bettina mentions the techniques that Russell has been writing about, which seem to be gaining favor internationally. She also discusses the problem of counterfeit honey on the world market. This problem was recently discussed in a medical journal article on using honey for wound care which pointed out that more than ten times more Manuka honey is sold on the world market than is actually produced in it's single source country of New Zealand! Imagine that.

And don't forget our meeting this coming Tuesday – that's Election Day – November 5th at 6:30 pm. Russell Vreeland will be discussing how to help our honey bees get through the long, dark, cold season. Bring your hive questions and observations to share.

President's Message

Bee there.

Hello Fellow Beekeepers

Cooler weather has arrived. I was in my bees the other day and found they are packing away nectar at a good clip. Nevertheless, I have been giving them supplemental 2:1 syrup just in case they need it. I'm hoping to get all three hives through the Winter and early Spring. The hives are currently strong and mite counts are minimal. All three were requeened with a brood break in June.

Please join us this Tuesday evening. Russell will talk about the over-wintering method he's been using. In addition, I'd like to have a discussion about preparation of hives for the Winter. What do you do? I'm looking forward to a lively discussion. Tim and Mickey Palmer will also be telling us about recent lectures they have attended. Hope to see you there!

George

Impressions from the 46th Apimondia in Montreal – Bettina Dembek

It's been a little bit over a month that I returned from Montreal where this year's Apimondia, the annual International Federation of Beekeepers Convention, took place. I'm still digesting all the new impressions I've gained and thought I'll share a few of them with you as a lot of it is applicable to what we discuss and do in our guild.

When I heard that I was one of 4,000 bee enthusiasts that had descended on Montreal this September representing 137 countries and picked up my scientific program that was as thick as the phone book of the entire Eastern Shore, I knew I would be in for a treat and very busy. For five days, we gathered at the Convention Center in lovely downtown Montreal and had the tough choice of choosing between 4-6 strands of presentations covering a wide range of topics such as: Advances in Honey Bee Genomics, the Impact of Pesticides on Bees, Breeding for Mite and Disease Resistance, the Detection and Prevention of Honey Fraud, Technical Innovations in Beekeeping, Honey Bee Nutrition, the Status and Conservation of Pollinators, Treatment-Free Beekeeping as well as Citizen Science and Bees.

For five days I tried to cram in as many plenaries and poster sessions as I could. My head was spinning heading from one interesting topic to the next; there was so much to learn, discuss, and meeting beekeepers from literally around the world was fabulous. But I also quickly realized that a lot of the research was way above my head and / or interest as, frankly, I do not care that much about photos taken by an electron microscope depicting slice after slice of the bees lower intestines, learn about bee nutrition way beyond anything I've ever read about my own nutrition, or sit through sessions on the bee genome that in its introduction already was way above my head (Russell, I think you'd have been on cloud nine!). So I quickly started looking for more practical presentation like Integrated Pest Management and visited the Exhibitors to see whether there was anything that I should know about.

The topic of this year's Apimondia was "Beekeeping together within Agriculture" and a lot of presentations centered around sustainability and working across sectors to solve the bigger issues such as loss of species and feeding a growing world population despite climate change. I've attended panels that discussed whether the honey bee should be treated as a wild animal or livestock and how that impacts your beekeeping philosophy. Tom Seeley's keynote on Darwinian Beekeeping showed how small -scale rural operations can indeed keep bees without any treatment. What I took away from it is that it is a very noble idea and possibly desirable but not for me. You need to invest a minimum of 4 years to get to a point where the losses will taper off and in the meantime you get hardly any honey and watch many many of your hives die (I would mourn each and every one of them). Frankly, I'm still torn between the question whether, as a beekeeper, it is my moral obligation to take care of my bees (the livestock idea) or whether I want to support the "survival of the fittest" idea. For now, I try to steer some kind of middle path, some refer to as sustainable or soft beekeeping. Peter Rosenkranz, one of the renown German honey bee scientists, also reminded us that bee health can be measured on two different levels: the individual bee or the colony. There's a lot of research now on bee resilience and bees healing themselves so colonies can overcome more than we might give them credit for. The challenge is that most research is done with one stressor/chemical and we don't know of aggregated effects when different stressors come together. Also, while we know the lethal dosage of each of the

chemicals, we don't really know much about sub-lethal concentrations and their effect on individual bees let alone the colony. I could go on and on but know that nobody wants to read all this, so let me get into something that pertains to all of us. I would love to encourage all of us to be very informed and cautions about what it is that we put in our hives. I've had many discussions with my German beekeepers about what honey is in Germany vs. here in the States and the increasing problem of honey adulteration. To combat this, stringent controls are common in the European Union, especially Germany or Brazil, but not so prevalent in most other countries in the world including the United States. One of the most shocking findings of the Apimondia honey contest was that 40% of all submitted honey didn't pass the test for being pure raw honey! Some argue that manipulated honey was submitted to test lab efficacy, others blame poor beekeeping and insufficient knowledge. The German beekeeper magazine dedicated an entire article to this shocking result and it made me think. Honey adulteration is a multibillion dollar well-organized international crime. Many presentations were dedicated to this topic and reminded me of the CSI shows on TV showing how global databases of pollen and heavy water (a water isotope) can help define whether the honey is really honey from the country claimed. There are also more common, basic tests done via mass spectroscopy to find out what is in the honey. I learned that 76% of the US honey for sale doesn't measure up. It is often a (corn) syrup or some other mixed solution. But it can also be "bad honey" because of unsafe or negligent beekeeping practices! I'm not so concerned about the strict honey guidelines that define how much fructose a honey may contain or the water content in your honey (if it is too much and is "wet

honey" it will soon turn into mead ... maye not so bad after all?!). What worries me is the residue from pesticides, insecticides, etc.. I can't emphasize enough how important it is that we all fully understand our Integrated Pest Management (see also resources below). If you treat, it is absolutely essential that you know how and when to treat with what. While it is questionable if you feed your bees sugar water when you have honey supers on, it gets really problematic when your honey shows traces of your insecticides, etc. because of bad practices in and around your hives. As I'm the biggest consumer of my honey and want only the best of the best for myself and anybody else, I'm deeply concerned about the use of pesticides and insecticides all around us. While there is not much I can do about Chincoteague town spraying or neighbors using Round-Up, etc. I am obsessed with what I put into my hives. Another thing that is often overseen is the storage of comb. The use of moth balls is a very widely used practice especially at this time of the year when beekeepers store their comb in bags with moth balls to prevent the dreaded wax moths ruin it all. However, airing it out in the spring is not enough! The residue shows up for years in your wax and also in your honey and hence the use of moth balls or



moth crystals is banned in Europe. Even Bayer advises against it! Thankfully, there is another natural solution: B401! It is a bacteria totally harmless to honey bees and environmentally friendly (even allowed in organic beekeeping) but lethal to the wax moth larvae. I was told that the product is/will be soon available in the States. The company I talked to at Apimondia is <u>Vitabeehealth</u>. After loosing most of my comb to wax moths in the past years, I'll try it this winter, and will let you know. My German friends tell me that it worked for them for all their comb that had protein in it. They also reminded me again to keep honey comb frames separate from brood frames as another precaution as wax moths feed on the protein, not so much the honey).

Oops, this is getting long - I better come to the end. In a nutshell, Apimondia was beekeeping information on steroids and I would encourage everybody who hasn't been to any of those beekeeping conferences to attend one. It is great fun, you learn a lot, and come away with new tricks, tools, and food for thought. We have several each year in driving distance and EAS was a great start for me. Next year's Apimondia will be in Russia followed by Chile ... a little bit far.

Wishing you and your girls all the best,

Bettina

Additional Resources:

- Apimondia Presentation abstracts are still available online here. Some presenters have posted their slides on the Internet.
- Learn more about Integrated Pest Management and all the Dos and Don'ts!
 - https://honeybeehealthcoalition.org/
 - https://www.ipm-coalition.org/
- The German article on Apimondia's fake honey is <u>here</u>

Next regular meeting: November 5th at the BIC 6:30 pm

