

Mountain Empire Beekeepers Association
Minutes
August 25, 2016

The meeting was called to order at 7:04 pm by Tim Service.

Pop Quiz questions from the July, 2016 meeting by Tim Service. All four questions were answered correctly. [See, it does pay to read your minutes!]

Presentation: Jackson Means, Virginia Tech, spoke on his research, "Varroa Mite Sampling." A beehive is the perfect host for pests because it is temperature controlled, has an ample supply of food, serves as protection and provides bee to bee contact. Among the honey bee pests are gut microbes (nosema, American foul brood); viruses; arthropods (small hive beetle), and varroa. Varroa destructor is the worst pest because it affects developing brood, reducing bee size and wing formation. Many viruses are also carried by varroa.

Varroa was discovered in 1904; in 2000 V. destructor was found to be a complex of species. They have been blamed for Colony Collapse Disorder, and may be related. The mite comes in on a bee and jumps into an uncapped cell; it then begins to eat the larva and lay eggs. Female mites are red, males are tiny and white.

Sampling the hive allows informed treatment decisions, and gives the beekeeper a window into the state of the hive.

Sampling techniques:

- Ether roll--put @250 bees into a Mason jar with ether and shake them around. The bees will die, and the mites will fall out.
- Powdered sugar-- same technique as ether roll except bees do not get killed. After rolling the bees in the sugar, let them out, and shake the sugar over white paper; count the mites. Treat the hives if there are 10 mites per 300 bees. Treat in late summer or early fall.
- Uncapping cells--take a thin knife to scrape the caps off the cells and remove the pupae, which do not survive. 80% of mites can be found in capped cells; the mites prefer drone brood. Treat if 10 cells in 100 are infested. This method is not recommended because of loss of brood and time involved.
- Sticky board (hard paper board covered in a sticky substance)--a new board has been developed by Ostig & Sammataro that is black and white' counting only 1/3 of board is necessary. If you get 60 mites per day, treat. (see www.greatlakesipm.com/instrvb.pdf for illustration and instructions).
- Sampling is time consuming and stressful on the hive; it only looks at one section of the total mite population.

Control Methods:

- Synthetic acaricides--coumaphos and tau-florvalint are resistant. Anitraz works pretty well. Oxalic acid, and essential oils have limited efficacy.

- Precision mite management is targeting mites more precisely with a combination of methods.

Jackson discussed the details of his master's research. He found that sampling is most effective in August/September. In early summer, mites are on drones; early fall with brood.

Break.

Bee Biology: Pollen baskets. Bees have baskets on their hind legs, called the corbicula. The hairs on the leg serve as pollen combs and rakes. The pollen press is in the joint and compresses the gathered pollen. Bees gather pollen by different methods: static charge; vibrational--wings stir up pollen; mechanical--stigma on the plant is triggered by the bee's visit.

Bees in the News: Epiphen cost increase may have an impact on beekeepers who are allergic to insect stings. An F-22 was grounded by a swarm on the wing; a beekeeper was called to collect the swarm.

Minutes. Mick Cunningham moved, and Jeff Wyatt seconded that the minutes be approved as written. Motion carried.

Treasurer's Report. Balance \$4,585.48. Filed for audit.

Old Business: Sugar purchase: Tim was unable to order sugar through Walmart as arranged by Mick Cunningham because MEBA is not a 501c3 organization. After discussion of whether to pursue 501c3 status, no motion was made to that end.

New Business: Gaynell Shawver moved that our speaker, Jackson Means, be provided a \$200 honorarium. Connie Armentrout seconded, motion approved.

Pollinator Week: Tim asked us to be thinking and planning for participation in 2017. Tim will be leaving on September 18 through January of 2017. Gaynell will preside. Mick Cunningham requested permission to spend \$200 on Brushy Mountain sale items for the 2017 class raffles. Eural Clippard moved to that effect, seconded by Diana Gardner. Motion passed.

What to do this month.

- Check for mites--use powdered sugar, alcohol bath or soapy water roll, or use sticky board.
- Feed 1:1 syrup right now to emulate nectar flow.
- Monitor for wax moths; infestation is quick and early treatment is essential.

Adjourned at 8:55 pm.

Respectfully submitted,

Tina Cunningham
Secretary, MEBA