



Southern Arizona Beekeepers Association

DATE: 10.11.17

LOCATION: Eckstrom Library @ 22nd Street and Columbus

ATTENDEES: (22 people)

FACILITATOR: Will Fitz

Sign in and Introductions –

Business-

Discussion Topic - open discussion meeting

Presenter - Will Fitz

Topics discussed – “winterizing”, feeding bees, mite treatment, wax moth treatment, pollen collection, native flowering plants, requeening.

Robert Schmalzel brought in pollen he has collected from Altar Valley within past 2 weeks. It was primarily orange (burro weed) and green (Palmer’s amaranth), with some yellow pollen (desert broom or snake weed). Some discussion of pollen use for human consumption – risk of allergic reaction, should not be consumed in quantity, suggestion that if beekeepers sell pollen for human consumption they should have liability insurance.

Plants that are blooming currently because of the last warmth of season are amaranth (*Amaranthus palmeri*) also known as pigweed; snakeweed or broom snakeweed (*Gutierrezia sarothrae*); burro weed (*Isocoma tenuisecta*); desert broom, greasewood or turpentine bush (*Baccharis sarothroides*); and wait a minute bush or desert mimosa (*Senegalia greggii*). Desert broom is usually the last plant to bloom in year, until the early bloom in the spring.

Robert Schmalzel shared that Mt Lemmon has white flowering plant alongside the roadway, from Windy Point to Bear Wallow (?) that bees utilize, comprising 25 miles approximately 5 feet wide, amounting to about 22 acres of plants. Pima County landscape crews are mowing it back.

Bee feeding discussion – Will Fitz states he feeds now until about Thanksgiving, puts out about 30 gallons of sugar water for the 30 hives in his yard, encouraging bees to build more brood. Then he stops at Thanksgiving, and begins feeding again in January. He is building up his hives to enable them to go to California for almond flowering. Sugar water ratio 1:1 encourages brood rearing, 1:2 encourages storing as winter feed (nectar like). He also feeds pollen patties and pollen powder. Feeding patties is more labor intensive, but each hive gets feed. Open feeding of pollen powder the more robust or stronger hives get more of the pollen powder. Commercial pollen patties are a mixture of soy flour, dehydrated egg yolk and brewers yeast. Richard and Hannah Clark make patties from equal parts frozen pollen, sugar, and drivert sugar (available at ABC Cake Decorating Supply in Phoenix). Drivert Sugar is a dry baking fondant that has a free flowing white particle appearance, like confectioners sugar without the corn starch.

There was some discussion of ordering pollen powder in large quantity through SAZBA, if enough people want to order, please let Will Fitz know.

Pollen Collection discussion – some beekeepers trap pollen for sale or to re-feed later in year to own bees. Put pollen trap on hive entry so that pollen sacs get knocked off into box below. Should not keep pollen traps on all the time, just during flow periods. Recommended to put them on for 1-2 days, then off for 3-5 days so bees can obtain and store sufficient pollen for their use. Recommendation made to weigh samples of pollen collected, label and freeze them for later use, and keep a record or graph of color and weight of pollen collected each week.

Wax moth discussion – wax moths can be a big problem. They thrive on old comb and pupa casings in hives, especially in weaker hives. They can destroy a hive. Jaime suggests that once a hive is infested with wax moths you will probably lose that hive. He just recycles the equipment. Strong hives can combat the wax moths, but if there is too much space in a hive the bees cannot compete with the moths. They lay their eggs on outside of hives, and the tiny caterpillars move into the hive and start building webbing and eat through the comb, larva, pupa casings and hatch into moths and repeat the cycle. The moths do not like sunlight or air flow, and freezing the combs for 24-48 hours will kill the moths, caterpillars, larvae, and eggs. Do NOT use regular moth balls on bee hives. Mothballs are made from naphthalene and are insecticides and insect repellents that have no place in a hive containing live bees. There is a product call Para-moth which contains the active ingredient Para-Dichlorobenzene 100%. (1,4 dichlorobenzene). It can be used with STORED hives and combs but not active ones. It is available from bee supply businesses. Richard and Hannah Clark have had success with *Bacillus thuringiensis v. aizawai* ((brand name XenTari), sprayed on combs in active hives and on a badly infested weak hive. The active hives recovered, the weak hive died but the wax moths are gone. Wax moths have a place in nature, they eat the detritus found in feral and wild bee colonies leaving a clean, open, welcome hive for the next swarm to come along. Wax moths produce a tiny ultra high frequency sound that can be heard with a special transducer, sounding like a tiny motor boat. Bats eat wax moths. Liza Smith reports that there is information that some wax moths have been found to metabolize plastics.

Mite Treatment discussion – Brood break equals mite break, because Varroa mites require brood to reproduce. Will has had success with the new treatment modality suggested by Randy Oliver of Scientific Beekeeping, i.e. soaking shop towels in a mixture of oxalic acid and glycerin and placing on top of frames in hive where bees chew up the shop towels.

<http://scientificbeekeeping.com/oxalic-acid-treatment-table/> Varroa mites are a big problem, and this time of year as the bee numbers shrink due to less available forage and diminished brood production the mite population can explode. It is recommended that beekeepers do routine mite counts, and if the count is greater than 3 mites/100 bees treatment is recommended. Keep drone brood to a minimum, as the Varroa prefer to lay eggs in drone cells since cycle is longer. Question left unanswered “should last mite treatment of year be prior to last brood cycle of year?” Brood break does not completely occur here in desert southwest because of warm winter conditions. Winter bees have to live for 3-4 months until spring reproduction cycle begins, summer bees live only 4-6 weeks, they work themselves to death.

Requeening discussion – Will and Jaime suggest requeening now, as during the winter queens are not as readily available and are more expensive. Jaime is raising his own queens, Will gets queens from commercial queen producers outside AHB areas. Younger queens seem to overwinter better, starting laying earlier and stronger broods. Monica raises own queens, floods her drone mating area with many Italian hives. AHB hives still have drones at this time, so it is more likely that any mating at this time of year will be with AHB drones. The suggestion was made to have a meeting with the topic of queens, re-queening, raising queens, etc. There was a mention of capturing queen and banking her, giving back to hive at later time. Discussion of different types of queen cages, wooden block with sugar plug vs one made from #8 hardware cloth. Tyler Mayberry brought in a handcrafted queen cage that can be pushed into the comb, giving queen access to empty cells for egg laying and reducing risk of her being killed by other bees while she is getting acclimated. Leave inside the cage for several days (3-5+) until aggressiveness diminishes. Mated queens are more easily accepted than virgin queens. Signs/symptoms of poor queen quality is that brood pattern is poor or “shotgunned”, low amount of brood, lots of holes in brood pattern. This time of year should have 2 or 3 frames of brood in the hive. In spring when there are more resources a good queen should have 8-9 frames of brood covered 70%. Hive needs to have room for queen to lay, if it is “resource bound”, i.e. all cells filled with pollen and honey or nectar there is no room for her to lay, need to remove a frame and put empty frame (preferably with pulled comb) for egg room. Catching an AHB queen is difficult, they run around like crazy as soon as the hive is opened. Jaime “sifts” the bees through a queen excluder nailed or screwed to a medium hive body. He shakes the bees into the box and the other bees get shaken through the excluder, leaving the queen behind.

Next meeting - 6-7:45 pm November 8th