

Montgomery County Beekeepers Association

Minutes for February Meeting

February 19, 2024

Apprentice Beekeeper Meeting – began at 6:15 pm

Led by Ed Erwin with 27 in attendance

Presentation Topic by Ed Erwin of BeeHarmony.org – Langstroth Hive Components

- **10 or 8 Frame Langstroth Hive**
 - Stand - to keep hive off ground
 - Bottom board (solid or screened) with landing board
 - Entrance reducer - reduce entrance area to assist new/weak hives, control ventilation
 - Deep super (brood box) - 9 1/8" deep
 - frames
 - Queen excluder - keeps queen from accessing to lay eggs, while workers can move through
 - Should be removed during winter
 - Honey super(s) - medium sized 6 5/8" deep
 - frames
 - Inner cover - allows for feeding, ventilation, and to prevent propolis sealing of outer lid
 - Outer cover or lid
 - Telescopic flat top
 - Telescopic pitched top
- **Feeders**
 - Entrance - sits outside hive, but can attract robber bees
 - Division board - sits inside hive and replaces 1-2 frames.
 - Hive-top - sits inside hive and is protected from robber bees
- **Hive Placement**
 - Place at slight angle to tilt entrance downward so rain doesn't enter
 - Keep out of sight to thwart theft
 - Keep bricks, rocks, or similar solid base below hives to discourage hive beetles

Apprentice Meeting adjourned at 6:50 pm

Monthly meeting – began at 7:04 pm

Led by President Matt Thomas

- Recorded in attendance were 66 members and guests
- Pledge of Allegiance led by Matt Thomas

Announcements

- Robert Lacey needs help with his beekeeping and is looking for volunteer

- Position to serve as 2nd Vice President is now available, as previous VP had to step down due to calendar conflict
- Volunteers are needed for Honey Bee Exhibition at the 2024 Houston Livestock Show & Rodeo
- Always looking for speakers for future association meetings
- 2024 membership dues are now being collected

Vendor Announcements

- Julie Norman of Winding Creek Apiary announced the shop's move from Willis to Conroe. On March 9, they will hold a Swap Meet, and they have Spit and Whittle get-togethers every Saturday morning. Orders for bee nucs and packages are being taken, and queens will be available late March.

Meeting Speaker - Bill Boytim, Master Gardener: Feeding Bees

- **What is Feeding?**
 - It's a tool to help reach beekeeping objective
 - Have a plan for desired outcome: building hives, stimulate wax production, stimulate hygienic behavior
- **Recommended Reading: Fat Bees, Skinny Bees by Australian Govt - manual for honey bee nutrition for beekeepers**
- **Why feed?**
 - To prevent starvation
- **Can feeding cause problems?**
 - Be mindful of when to feed, as inappropriate timing can be counter productive to hive development
- **When to feed?**
 - Fall to ensure winter stores
 - During dearth
 - Spring to stimulate brood rearing
 - Constant feed for queen rearing
 - Don't feed if honey supers are on hive
- **What to feed?**
 - Carbohydrates - substitute for nectar
 - Sugar syrup, HFCS, frames of honey, sugar bricks, granulated sugar
 - Protein - substitute for pollen
 - Pollen or pollen substitute - make sure it's irradiated to prevent transfer of disease
- **How to feed?**
 - Top feeders for syrup - large volume
 - Bucket feeders for syrup - large volume
 - Bulk feeders in Apiary
 - Plastic Bags for syrup - need spacer to prevent compression of bag
 - Division Board feeders - variable capacity (Cap and ladder feeder)
 - Boardman Entry feeders

- Easy and good for queen rearing
 - Can also be used internally
- **Rate of feeding is important -**
 - Feeding spanned over time is more effective than all at once
- **Protein feeding**
 - Pollen patties
 - Place on frame tops
 - Powdered pollen in hive or in feeders
- **Recommendations on Feeding**
 - Be wary of yeast formation in sugar
 - Winter feeding
 - 2:1 sugar water
 - Honey brix of 82 or higher
 - Sugar bricks
 - Spring/summer feeding
 - 1/1 sugar water

Meeting Speaker – Dr. Bob Rogers, DVM: Making a Plan to Control Varroa Mites

- **Varroa Mites are the number one cause of hive loss, ahead of starvation and pesticide poisoning**
- **Varroa mites feed on adult fat bodies**
 - Fat bodies serve similar function as a liver
 - Bees store protein in fat bodies, while carbohydrates are stored in honey
 - Nutrient storage
 - Regulates larval growth
 - Important in disease resistance
 - Detoxification
 - Temperature regulation
- **Varroa mites transmit 12 known viruses**
 - Deformed wing virus is most common
- **Treatment results vary**
 - Treatment free - start with hygienic bees, live in low risk assessment, few feral
 - Varroa sensitive hygienic bees
 - Grooming leg biting
 - Detection - brood removal
 - Uncapping and recapping
 - Cocoon entombing
 - SMR Mite reproduction depressed
 - On *Apis cerana*
 - Mites developed only on drones
 - Short drone rearing period
- **Making a Plan: Integrated Pest Management**
 - Timing is critical
 - Temperature sensitivity

- Brood or no brood
- Supers on?
- Will treatments penetrate clusters?
- Important to test before and after
- **Life Cycle of Varroa Mite**
 - 50% of hives have varroa-caused viruses in them
 - Mites are spread by drifting or robbing
 - 2-4 days on adult bee
 - Enter cell before brood is capped
 - 12 days in capped brood
- **Low mite counts important**
 - In early spring - for healthier brood
 - Early fall - before bees
- **Mite Test**
 - Dawn Soap - 1 TBSP in ½ gallon water
 - Gather approx 300 bees in test container
 - Shake and count mites
 - Test before treatment
 - Test again 2 weeks after treatment
- **Sticky board**
 - Comparable results to dawn soap test
 - Can make sticky boards
- **Short-comings of testing**
 - 85% of mites are in brood
 - Biased - testing nurse bees, when mites prefer drones
- **Effectiveness of treatment depends on population phase**
 - No brood = oxalic acid/thymol
- **What does not work**
 - Visual inspection
 - Powdered sugar
 - Screen bottom boards
 - Small cell combs
- **Moderate Efficacy**
 - Hygienic bees
 - Leg biters
 - Hopguard/Apivar
 - Splits
 - Brood interruption
- **Causes of Treatment Failure**
 - Incorrect application
 - Unreasonable expectations
 - Pesticide/herbicide exposure
- **Apivar**
 - Mites are becoming resistant

- Hanging from nail allows strip to hang straight
- Consider as a moderate % reduction
- **Amiflex**
 - 7-day treatment
 - Not for use when supers are on
- **Formic Acid**
 - Penetrates capped brood
 - Risk to damaging queens
- **Hyperthermia - heat treatment trials**
 - 110.3F for 4 days
- **Thymol (Apiguard, Api-life-var)**
 - Temperature sensitive
 - Can damage bees antennae and eyes, delay queen laying
 - Can overcome weak hives
- **Oxalic acid**
 - Sublimates 324-375F
 - Best with no brood
 - Safe for use in summer - best at 90F
 - Should wear respirator
- **Oxalic/glycerin dribble method**
 - Most convenient and good for 8 frame boxes
- **Oxalic acid sustained release swedish sponges or maximizer pads**
 - Randy Oliver's website has instructions
 - Use respirator
 - Leave in hive 45-56 days
- **Best options in Texas heat?**
 - Oxalic acid sublimation
 - Sustained release lab sponges

Door Prizes –

- Magnolia Bee & Supply back scratcher hive tool, sweet honey hand soap
- Winding Creek Apiary gift cards
- Bee bobble head

Monthly Meeting adjourned at 9:08 pm

(Submitted by Keri Warren)