

Orange County Beekeepers Association

Meeting Minutes

May 12, 2022

Prior to tonight's meeting, OCBA hosted a used equipment sale and pizza party for in-person attendees. All indications suggest it was a success! All proceeds will be donated to the Tarpj lab at NCSU.

Tim Struttman, OCBA President, opened the meeting and welcomed everyone for the May meeting. The meeting was attended by approximately 37 members (~17 via Zoom, and ~20 in-person at the Orange County Extension Office in Hillsborough).

Nancy Oglesby, OCBA Vice President, introduced our speaker. **Cynthia (Cindy) Hodges** is a Georgia Master Craftsman beekeeper and president of the Dunwoody Beekeepers Club in Georgia. In addition to her beekeeping operation with multiple apiaries (Hodges Honey), she also manages rooftop colonies at the Hyatt Regency Atlanta. As part of her Master Craftsman certification, Cindy was first author on a research project published in 2019.

Presentation:

“Propolis: Good for Bees AND Humans” – Cindy Hodges

Cindy defined propolis as “a brownish resinous material of waxy consistency collected by bees from the buds of trees and used as a cement in repairing and maintaining the hive”, noting that the term originates from Greek: *pro-* (for) *-polis* (city). The composition of propolis varies with geography and plant source (poplar, pine, birch, elm, alder, beech, and horse-chestnut are common sources of resin). The final product, produced by honey bees includes approximately 50% resins/vegetable balsam, 30% wax, 10% essential and aromatic oils, 5% pollen, and 5% other substances including organic debris.

Throughout history (as far back as 300 BC!), propolis has been used medicinally due to its antibacterial, antifungal, and antiviral properties. Uses have included as a wound and oral disinfectant, topical treatment for skin problems (psoriasis, burns, acne), toothache, anti-pyretic (fever), and as an antioxidant and anti-inflammatory. Modern research has suggested that propolis acts directly on microorganisms as well as indirectly via stimulation of the immune system.

Within the hive, honeybees use propolis to waterproof nest walls, structurally to reduce entrance size, cover holes and crevices, and as an aid for comb attachment. In the context of colony health, propolis is used to create “propolis prisons” to trap small hive beetles (prevents reproduction) and has even been observed as a means to mummify the bodies of small nest invaders such as mice! Further, volatile compounds and contact with propolis may reduce wax moth reproduction/development, and application of propolis to cleaned and polished cells is observed, hinting at some benefit to developing brood.

Current research is exploring the role of propolis in worker bee immune response and colony social immunity. Cindy's research on textured hive interiors to increase propolis deposition is a means to encourage the honey bee's natural tendency to create a “propolis envelope” on the interior of the hive as a microbial barrier. It is becoming clear that propolis application within the nest is an adaptation that promotes colony health, therefore techniques described in her publication such as roughening the

interior wood of hive boxes, could be a simple way for the beekeeper to tap into the honey bee colony's adaptive use of propolis for increasing colony health.

For more information:

Cynthia R LHodges, Keith S Delaplane, Berry J Brosi, Textured Hive Interiors Increase Honey Bee (Hymenoptera: Apidae) Propolis–Hoarding Behavior, *Journal of Economic Entomology*, Volume 112, Issue 2, April 2019, Pages 986–990, <https://doi.org/10.1093/jee/toy363>

Club Business:

Membership

No update.

Finance

No update.

Bee School

No update.

Apprenticeship Beekeeper Program

Kent and Vikki Robertson, Mentorship Co-directors, reported that a first year cluster with the 2022 apprentices and 2 other younger beekeepers has been formed and will meet regularly to inspect their hives.

Outreach

Dawn Rogers, Community Outreach Director, has been able to get speakers for all presentation/outreach requests received so far. She mentioned that apprentices need to do 2 volunteer events during their apprenticeship year. She reminded attendees that you don't need to be an "expert" to volunteer at these events as the general public is eager to learn even basic facts about honey bees.

Other Announcements:

- Tim provided a reminder about the bee buddy program, as well as the beekeeper assistance program.
- The club is still looking for volunteers for the Christmas parade in Hillsborough on December 4, 2022. Email Nancy or Tim if interested (presvp@theoeba.org)
- Tim reminded attendees of the upcoming summer meeting of the NCSBA, which will be held in Hickory, NC, July 28 – 30, 2022.

Door Prizes

1. gift bags: (in person winner)
2. gift bag: (online winner) Peggy Wilson
3. gift bag: (in person winner)
4. tea towels: (online winner) Erika Wittchen

5. dog collar bow tie: (in person winner) Carrie Donley
6. bee themed fabric: (online winner) Grey Reavis
7. unassembled 10 frame deep: (in person winner)
8. bee earrings: (online winner) Karen Lauterbach

Next Month's Speaker

The speaker for the June 9th meeting will be **Randy Oliver** (!), of ScientificBeekeeping.com. Randy will talk about his 2022 research on pollen substitutes, bee nutrition, and extended-release oxalic acid.

Erika Wittchen
OCBA Secretary