Orange County Beekeepers Association

Meeting Minutes

October 13, 2022

Tim Struttman, OCBA President, opened the meeting and welcomed everyone for the October meeting. The meeting was attended by 44 members (21 via Zoom, and 23 in-person at the Orange County Extension Office in Hillsborough).

Nancy Oglesby, OCBA Vice President, introduced our speaker, **Jon Zawislak**, professor of Apiculture and Urban Entomology for the University of Arkansas System Division of Agriculture. Dr. Zawislak has a background in botany and entomology and is an EAS certified Master Beekeeper.

Presentation: "Common Scents: Honey Bee Pheromones" -- Jon Zawislak

Honey bees have developed some fascinating and intricate methods of communication, including a complex language of chemical signals known as pheromones. In tonight's presentation, Dr. Zawislak provided an extensive overview of the vast array of pheromones that honey bees use to communicate.

Pheromones are involved in nearly every aspect of honey bee daily life: development, reproduction, foraging, defense, orientation, and organization. Of these, queen pheromones are the main regulator of honey bee colony structure and function. The main component of the queen pheromone cocktail is Queen Mandibular Pheromone (QMP). Sufficiently high concentrations of QMP inhibits swarming and supersedure, and suppresses worker ovary development thereby preventing a laying worker scenario. Other queen-specific pheromones include Dufour's gland pheromone (linked to reproduction and egg-marking) and queen fecal pheromone (produced by virgin queens to aid worker acceptance by reducing aggression). Generally, queen-produced pheromones relay that the colony is queenright and the queen is healthy.

Other pheromones are produced by workers and not the queen, such as alarm pheromones (eg, isopentyl acetate, 2-heptanone), forager pheromone (released by older foragers, slows maturation of nurse bees, thereby regulates the age/task structure of the colony), Nasanov scent (promotes aggregation and recruitment to attract lost/disoriented bees to a hive and also helps to maintain a cohesive swarm when resting/bivouacked and in flight), and worker footprint pheromone (builds up at hive entrance, increasing attractiveness; marks flowers as visited).

Drones also produce pheromones (drone mandibular and drone tarsal gland pheromones) which may help to attract virgin queens to drone congregation areas, and as-yet identified pheromones that might determine drone acceptance or rejection from a colony. Finally, brood also produce pheromones that provide information such as age and caste of each larva.

Club Business:

Tim introduced a member who spoke briefly about her discovery of American foulbrood at her apiary. It seems restricted to one yard, and she notified the NC apiary inspectors promptly to provide best practice resolution.

Janet Staats provided an update on the Hillsborough Christmas parade float:

- The group of volunteers has had their first meeting. The theme is “Light up the night—Joy”. There is a $150 entry fee. Location of build is former Maple View Farms. The owner is excited to provide assistance in all things promoting pollinators. He also offered use of tools/equipment.
- “Bee Joyful” design: form will be a skep hive (most familiar to the public). There will be people on the float, eg, a “Queen bee” and her attendants, Approximately 10 walkers doing the waggle dance will follow the float on foot. Music will be “Flight of the Honeybee”, walkers can hand out honey candy or honey sticks.
- They will meet again soon to determine a list of items needed. Email Janet to get more info.

Reminders:

- Temporary Hive Care/Rehoming program is still active
- Bee School registration is now open online. $75 individual, $125 for family
- Announced: OCBA committed to $3500 per year/5 years to the Endowed Professorship in Apiculture

Membership

Wayne Vanderburg, Membership Co-director, nothing new to report.

Finance

Jim Greco, Treasurer, nothing new to report.

Bee School

Randall Austin, Education Director, nothing new to report.

Apprenticeship Beekeeper Program

Vikki Robertson and Kent Robertson, Mentorship Co-directors, reported that the apprenticeship program is still seeking applicants (age 11-15 years) for 2023. Only 1 applicant so far!

Door Prizes

1. Hat: (in person winner)
2. Hat: (online) Mark Peters
3. OCBA tote: (in-person winner)
4. Hive tools (3): (online) Lisa Vogel

Next Month’s Speaker

The speaker on November 10th will be Nick Naeger, from the Washington State University Department of Entomology. His lab studies the interaction between honey bee nutrition, diseases and pathogens, and the honey bee immune system. His lab is developing a fungal treatment for varroa and virus control.

Erika Wittchen
OCBA Secretary