

November 2020 Newsletter

Monthly Meeting

November 19 | 7:00 p.m. Virtual Meeting via Zoom

Lessons Learned

Presented by AC beekeepers in their first three years:

Lindsey Chinni, Sarah Stevens, and Jason Rimmer

This is always a spirited evening of give and take, as we hear how new and relatively new beekeepers have fared this year. We offer pats on the back, condolences, and tips for future.

Join in virtually to share your experiences and your knowledge with your fellow beekeepers, and learn something new!

This will be our last full membership meeting of 2020.



Link to the Zoom meeting:

https://us02web.zoom.us/j/89668153610? pwd=SVNMd01mYVJxZm5MUFR5eEFaSEF6Zz09

Membership Renewal

You can now renew your annual membership online! Choose the form that applies to your wishes: renew ACBA membership only, ACBA and NCSBA both, or NCSBA only.

https://www.alamancebeekeepers.org/2020/11/12/renew-club-membership-for-2021/





Honey bee foraging on Boneset, *Eupatorium perfoliatum*. Photo by Jeff Telander.

What Happened to the Drones? Geoff Leister

As we finalize our end of season hive inspections, autumn preparations by the residents in hives began in earnest on October 10th in my apiary. That is when I noticed my girls serving eviction notices and kicking out the drones. This is triggered by cooler temperatures and low availability of nectar and pollen. In the image below, three drones are literally being grabbed and dragged out and onto the porch and one drone has succumbed to probable starvation as the house bees refuse to allow them access to food stores. House bees and guard bees will also simply prevent returning drones from entering the hive. Sometimes rejected drones are seen wandering around outside of the hive and on the ground, some with ragged wings. During the onset of autumn, drone pupae removal may also occur, and these white naked pupae may be seen on the ground or on the hive porch. Some might think that most drones die because of sex, but this is not the true. Most drones die of starvation and hypothermia, after being denied hive and food access. So why are drones escorted out of the hive?

Based on what we know about the in-hive behavior of drones, it is more about what they don't do in the hive that determines their autumn fate. They cannot gather nectar (shortened proboscis) or pollen (no pollen baskets), they do not tend the brood, they do not build comb (no wax glands), and they do not protect the colony (no stinger). They do mate with queens and provide genetic diversity that is vital to the survival of the species. They do feed on and utilize more honey and pollen stores because of their size. The workers force the drones out of hives, lowering the population and thus conserving food supplies.

Worker bees expelling drones from colonies has been fantasized about by Belgian poet and beekeeper Maurice Maeterlinck in his book **The Life of the Bee** published in 1901 and translated by Alford Sutro in 1914. It can be found here on line: https://www.gutenberg.org/files/4511/4511-h/4511-h.htm or downloaded as PDF here https://dl.tufts.edu/concern/pdfs/cc08hs87f. Chapter VII is entitled "**The Massacre of the Males**" and in it he describes this annual honey bee event with human characteristics, emotions, and reasoning. Here is sample from pages 353-354:

..."Some succumb to their wounds, and are at once borne away to distant cemeteries by two or three of their executioners. Others, whose injuries are less, succeed in sheltering themselves in some corner, where they lie, all huddled together, surrounded by an inexorable guard, until they perish of want. Many will reach the door, and escape into space dragging their adversaries with them but, towards evening, impelled by hunger and cold, they return in crowds to the entrance of the hive to beg for shelter. But there they encounter another pitiless guard. The next morning, before setting forth on their journey, the workers will clear the threshold, strewn with the corpses of the useless giants; and all recollection of the idle race disappear till the following spring."



Notes from the October Meeting

Raina Jain was our guest presenter for the evening. She talked about her scientific process of thinking, hypothesizing, and testing in an effort to relieve honey bees of 🎋 the burden of Varroa mites. The patent for her invention is pending. We were lucky to be able to book time with 🎋 this young scientist. What an inspiration! Thank you, Kaina Jain, for your work and your time with us.

K Ira told us we can expect to see the ballot soon, as he is * still working on it.

Bees in the News

Click on the headline to read the article.

Some bees are born curious while others are more single-minded, Chelsea Cook, Phys.org. "This research suggests successful societies make better decisions when members, by virtue of their innate learning styles, collect and communicate a diversity of information ... Diversity of learning behavior in individuals may help social groups adapt to shifting global environments." Link to the full study is included.

Honey bees lose sleep after ingesting pesticides, leading to greater stress and lower hive survival rates, Marissa Shapiro, Research News @ Vanderbilt, 11/5/2020. "Bees that ingest nonlethal levels of neonicotinoids are losing sleep, according to new research from Vanderbilt University. That disruption of their circadian rhythm causes honey bees to lose their sense of time and navigation, leading to broader stress within highly social bee populations and lower hive survival rates."



November in the Bee Yard

Courtesy of Nancy Ruppert

- Combine hives that are weak/have failing queens.
- Ensure adequate ventilation near top of hive.
- Feed thick syrup, if needed, for winter stores.
- Provide weights (brick, rock, concrete block, etc.) for tops of hives to limit wind-induced toplessness.
- Plant trees for future nectar/pollen sources (tulip poplar, maple, sourwood, etc.).
- Consider closing off screened bottom board to improve heat insulation.

https://growingsmallfarms.ces.ncsu.edu/ wp-content/uploads/2015/02/CALENDAR-FOR-BEEKEEPING-IN-CENTRAL-NORTH-CAROLINA.pdf?

Officer Selection

An opportunity to vote for ACBA officers for 2021 has been sent to your email address. If you didn't see it, check your junk/spam folder for an email from invitations@mail.electionbuddy.com. Voting ends at 5:00 p.m. on November 19, the date of our last meeting of the year.



Officers for 2020

President: Ira Poston Vice-President: Mike Ross Recording Secretary: Sheyenne Michelizzi Treasurer: Sarah Stevens Program Chair: Caitlin Vatikiotis-Bateson One-year Director: Chuck Couch Two-year Director: Johnny Mills Three-year Director: Paul Jollay Webmaster : Geoff Leister

Newsletter: Cynthia Pierce