Joco Beekeepers

A monthly newsletter brought to you by the **Johnston County Beekeepers Association**



Officers

President Jacob Giddens Vice President Bert Stoner Secretary Karen Holliday Treasurer May Markoff **Program Director** Guy Gettys

Meeting Information & Agenda

- September Meeting is Monday the 16th.
- Be sure and check out the recent updates to the JCBA website.
- Free door prizes
- Right around the corner JCBA membership (link)
- Right around the corner NCSBA membership (link)

BEE Basics before each meeting!

"BEE Basics" is a general talk held before each meeting. At 6:30 - 6:55. The purpose is to gain basic info for NEW Beekeepers & Reminders for experienced Beekeepers.

Club Apiary Inspection Meeting

There will **NOT** be a Clayton Apiary inspection meeting this coming up Saturday Sept 14 due to the Birds, Bees, and Butterflies Symposium that will be going on at the Johnston County Ag Center.

See Dates, Times and Directions for the Monthly Club Apiary Meetings on our website.

Here This information will also be added to our Facebook page and group soon.



Directors

1st Director Thunderhawk Chavis **BEEKEEPERS** 2nd Director Jim Dempster ASSOCIATION 3rd Director Ron Lassiter **Extension Agent** Brandon Parker Webmaster/Social Media Mark Holliday

In this Issue

	Officers1
	Directors1
	Meeting Information & Agenda 1
À	BEE Basics before each meeting!1
٧	Club Apiary Inspection Meeting 1
	Have a story? Would you like to be featured in the newsletter?1
	Businesses and Services1
	Native Plants for Bees!1
	Like us on social media f1
	This Month's Bee Tips! 2
	Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program2
	Bees show off the perfect landing 3 Bee Fun Fact!

Have a story? Would you like to be featured in the newsletter?

Please submit your request to Newsletter@jocobee.org

Businesses and Services

Businesses and Services offered by JCBA are listed on our website at (click here)

Native Plants for Bees!

Link for native plants good for bees (click here)

Like us on social media



This Month's Bee Tips!

- Continue measures for pest control; if hives exposed to but not .sickened by American foulbrood, apply treatment to prevent full-blown disease. Varroa control should be completed by end of month!!
- May feed thin (1:1 or more diluted) sugar syrup for 2-3 weeks to stimulated queen laying---builds up winter population---but by last week of September, begin feeding thicker (2:1) syrup for winter stores, although thicker syrup may not be necessary if > 3 supers of honey left on hive and/or heavy fall nectar flow.
- ☑ Consider Nosema assessment/treatment.
- Combine colonies later in the month if weak and/or have failing queens.
- ☑ Should have brood later in bottom box → if not, may need to rearrange things.



Here is a message that was sent to all chapter clubs for all members from Rick Coor the past NCSBA President;
North Carolina Beekeepers, The USDA has a program for beekeepers that have certain honey bee losses. Please refer to the Farm Service Agency's Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program Fact Sheet for more information. The website is www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2018/elap_fact_sheet_april2018.

Please contact your local Farm Service Agency for assistance.

Paul Newbold







Bees show off the perfect landing

Honey bees undergo a sudden transition from speeding aircraft to hovering helicopter as they perform the delicate art of landing on a flower.

Unlike the 'controlled crash' of a fly landing, the bee lands with utmost delicacy after 'reading' its airspeed visually, hovering above its landing ground and sensing it with vision, feelers and legs.

Scientists worldwide have devoted decades to studying how honeybees navigate their way around the landscape but now a team from The Vision Centre, The Queensland Brain Institute at The University of Queensland, and Lund University has revealed for the first time how they perform the final, but tricky art of landing.

"As any trainee pilot knows, landing is one of the hardest things to do, as everything around you is changing so quickly," Professor Mandyam Srinivasan said.
"It requires excellent co-ordination to get the speed, angle, distance and touchdown point exactly right - especially if, as in the case of the bee, the landing surface is sloping or even upside down."

The team used a special tiltable bee-landing platform and a high-speed camera to film the bees in the final moments of touchdown, and identify each of their separate actions.

On approach to their target the bees use 'optic flow', the stream of visual signals provided by their eyes as the landscape speeds past, to slow down and move from forward-flight to stable hover mode about 16mm from the platform, where they came to a dead stop.

They hovered for a few thousandths of a second until their hind legs contacted the landing ground and the lowered themselves gently onto it - regardless of the angle at which it was tilted.

However, when the bees landed on surfaces ranging from vertical to upside down, their antennae came closest to the surface during the hover phase. The team saw the antennae graze the surface and this mechanical contact triggered the bees to reach up with the front legs, grasp hold of the surface and then slowly heave their middle and hind legs up too. "We hadn't expected the antennae to play a role and it adds a further dimension to the 'instrumentation' the bee is using in order to achieve the perfect landing," said Professor Srinivasan, who has been studying honey bees for more than 20 years.

More subtly still the bee appears to use its visual system to correctly position its antennae, in order to 'read' the actual slope of the landing surface. However this creates a puzzle: because the bee is hovering and no longer experiencing optic

flow from its forward motion, it must be using some other kind of visual sensing, such as stereo vision.

"We are keen to explore this possibility," Professor Srinivasan said.

Another intriguing question is raised by the fact the bees are most comfortable on - indeed seem perfectly adapted for - slopes of about 60 degrees.

"We'll have to see if that is the typical slope presented by the petals of the average flower," he adds.

Bee Fun Facts

- 1. Mead, which is made from fermented honey, is the world's oldest fermented beverage.
- 2. Honey bees beat their wings 200 times per second, creating their trademark "buzz".
- 3. Honey bees don't sleep. Instead, they spend their night's motionless, conserving energy for the next day's activities.
- 4. Honey bees are not born knowing how to make honey. Instead, they are taught in the hive by older bees.



