## ORANGE CO Beekeepers

JUNE MEETING



### **Swarm Dynamics**

Dr. Juliana Rangel, a new addition the the NC State team, shared with us her research on swarm dynamics. She has been working with Tom Seely at Cornell on swarms and now will continue that research at State. Her work involved creating hives just about to swarm which means lots of brood, high population of young workers, a good supply of nectar and pollen and a shortage of space. The questions she was interested in exploring involved which bees, how many and what type were instrumental in creating the decision to swarm, what is the timeline, and what signals are given to indicate swarming. The signals investigated included piping: "time to get ready", the buzz run signal: "time to go", the shaking signal: "get active" and the waggle dance: resource X is at location Y.

What she discovered was that in large populations there is reduced queen pheromone leading to the production of queen cups. With the beginning of swarm cells, some adult foragers begin searching for potential nest sites. These older foragers are the 5% oligarchy that leads in the decision making to swarm. These bees begin the piping and buzz run signal that is then picked up by other workers and leads very quickly usually within 10-18 minutes, to actual departure. Understanding how decisions are made and communicated in the hive will help us all become better beekeepers, thanks to the work of Juliana and others like

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# Highlights

#### **Extractor Purchase**

A Decision was reached to purchase a Dadant extractor for club use.It will be picked up at the State Meeting and be available for member use.

#### State Fair Plans

The committee to organize our booth for the State Fair will meet at UUCH at 6:30 on Thursday July 22 to formulate plans for our booth. We hope that everyone who signed up will be able to attend but all are welcome.

#### State Meeting

Remember the <u>NCSBA Annual</u> <u>Summer Meeting</u> is the first week in July in China Grove, NC.

#### July Meeting

The July Meeting will be on July 8th at 7:30 at the Ag Extension building in Hillsborough Our speaker will be past president Ken Medlin demonstrating woodenware including a bee vac.

## **Summer in the Beeyard**

Queen Rearing, Dividing Hives, Late Swarms, Sourwood Production, Summer Feeding for Weak and New Hives, Grumpier Bees.





