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GUILFORD COUNTY BEE KEEPERS ASSOCIATION

BEEKEEPING NEWS

APRIL, MAY, JUNE, 2007

a local chapter of NORTH CAROLINA STATE BEEKEEPERS ASSOCIATION, INC.

MEETINGS & PROGRAMS:

- **SATURDAY, April 21, 10:30-2:00 p.m. ANNUAL FIELD DAY** at Hagan-Stone Park shelter #5

5920 Hagan-Stone Park Road, Pleasant Garden, NC
http://www.greensboro-nc.gov/NR/rdonlyres/FF80D16A-B31D-41A8-9D3A-2546F30C5E3F/0/hsmap1.pdf

Hagan-Stone Park is one of Guilford County's most beautiful parks and conveniently located.

The club will provide hot dogs, hamburgers and the fixings. Members are requested to bring drink, side dish and or desserts to share.

Activities and prizes will be provided along with a Bluegrass Band for listening entertainment.

Smoker contest. Bring your smoker and fuel and let's see who can get it lit the soonest. No torches please!

Honey tasting contest. Come and see if you can really tell the difference in varietal honey or are we just making it up?! Live colonies of bees will be provided for those wishing to take their practical test or for those just wanting to look inside.

Gadget contest. Bring your favorite high tech or low tech invention for others to see. A great way to share your latest brain storms. Also feel free to bring other beekeeping items that might be interesting to the group!

- **Tuesday, May 8, 6:30 p.m.** (covered dish meal)

Dr. Buddy Marterre, President of Forsyth County Beekeepers is well respected in the beekeeping community and has agreed to share insights on "bee stings: immunology, allergy and treatment"

- **Tuesday, June 12, 7:00 p.m.** (no meal)

Ken Pipes, a local favorite from Alamance County Beekeepers has previously shared his experiences in candle making and queen rearing will now update us on his progress with "chemical free" beekeeping. A long time beekeeper has been keeping bees without any treatments for the last 5-6 years. Come out and learn his secrets for success.

Articles of Interest

I like to drip honey over vanilla ice cream and peaches. As a condiment, honey can top anything from apples to zucchini. Give it a try!

from N. Faircloth: **Back on March 2 & 3, I attended the NC & SC State Beekeepers Convention in Monroe, NC.** *Aside from looking at the beekeeping equipment on display & buying some of it, most of my time was spent at the various presentations by noted entomologists, etc. From my notes and those of Emerson Heatherly, we felt you may benefit from our condensed version:*

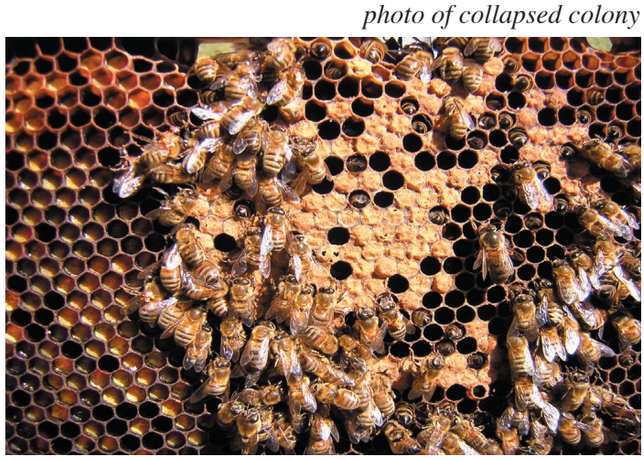
Dr. Dewey Caron, Ext. Entomologist Univ. Delaware, discussed "Surviving the Winter". He said our fall colonies need to be strong, young bees, good brood with pollen and food stored in close position. We should inspect early... before Labor Day to see the bees are flying in good numbers, remove drone brood if present. Frames & wax should be reasonably new. Check for diseases & pests. Determine varroa populations & treat if necessary or use appropriate IMP measures. ••Brood & cluster should be on the bottom (if using 2 hive bodies). ••Sucrose sugar is preferred to HF Corn syrup which crystallizes easily. He did state that sugar syrup and confinement (such as the bees will be during cold, produces Nosema.) Therefore, Fumagellan (Fumadil) should be included. ••Dry sugar (like it comes from the bag) is an old time method of feeding bees which works as long as bees have access to water. (*My suggestion, what not feed dry sugar with a container of water as a backup to liquid feed?*) ••Deaths overwinter usually occur from starvation by having too few bees for critical mass needed to prevent freezing. ••Lack of ability to void waste causes premature aging, and, ••Parasitic Mite Syndrome's cumulative effects of viruses, etc. ••Supplemental food preparations (pollen, pep mixes, etc.) should be saved for early spring.

Dr. David Tarpy, Professor NC State Univ. Spoke about the current hot topic of the "dwindling, disappearing, Colony Collapse Disorder". The short of it is the cause remains unknown at this time. Some variation of Nosema is suspected (along with almost everything else). Symptoms usually are: •Adults are gone leaving no dead bees, •Small cluster with queen & brood, •Ample food, •Little evidence of robbing or wax moths & no Small Hive Beetles.

Laboratory exam of bee corpses show: •High varroa levels, •Kidney damage, •No tracheal mites, •Microscopic views of thorax slices show signs of viruses, and •Evidence of fungus in digestive tracts. •* Suggests not reusing equipment right away...let it air out.

David Westervelt, Environmental Specialist from Florida spoke about the Africanized Honey Bee and how they are dealing with them. He stated that there were •no pure line yellow (European) Honey Bees found in their tests (indicating mixing with AHB). •Beekeepers are marking and clipping their queens. •No beekeepers are permitted to gather swarms or extract bees from structures (all require destroying). •AHB abscond and swarm at will with only 5-6 thousand bees. •They like small (gallon size) cavities (like water meters) and will locate under tree limbs in exposed nests. •Still very defensive of their hives. Public & outside workers must adapt to more vigilance not to stray into bees. •Bee hives restricted to areas away from homes. *(more next time on SHB)*

photo of collapsed colony



Texas A&M University - Agricultural Communications
December 29, 2006

Research Upsetting Some Notions About Honey Bees

Science Daily — Genetic research, based on information from the recently released honey bee genome, has toppled some long-held beliefs about the honey bee that colonized Europe and the U.S.

According to research published recently in Science, an international professional journal published by the American Association for the Advancement of Science, the four most common subspecies of honey bee originated in Africa and entered Europe in two separate migrations, said Dr. Spencer Johnston, entomologist with the Texas Agricultural Experiment Station and one of the authors of the article.

A large number of different bee species exist in Asia, where it had long been thought the honey bee originated, Johnston said.

"Their origin in Africa was suggested in other studies, but our result shows it dramatically to be true," he said.

Taking genetic information from the honey bee genome sequencing effort, researchers from Texas A&M University, University of Illinois, Cornell University, Washington State University, University of Kansas and the University of California-Irvine, and one private producer traced the genealogy of honey bees. Two branches originate in Africa.

The honey bee is not native to North America; it was introduced from Europe for honey production in the early 1600s, Johnston said. Subspecies were introduced from Italy in 1859, and later from Spain, Portugal and elsewhere.

When honey bees collected in Europe and Africa were studied, they separated genetically into four distinct groups, he said.

However, the genome of U.S. bees "was a complete mix of the three different introduced European subspecies," he said.

That mixture is changing with the introduction of the fourth subspecies from Africa in 1990. The form that was Italian mixed with other strains has been crossbreeding with an Africanized-Spanish strain. In effect, the Italian mix is disappearing. This has not happened to the same extent with the European varieties.

"It is clear that introduced African bees mated with existing U.S. bees and that colonies with large portions of the African bee genome were able to out-compete the original U.S. mixture," he said.

"Why the Africanized honey bee successfully invaded the New World but has not moved across Europe, we don't know," Johnston added. "Maybe (the U.S. varieties) were selected (by beekeepers) for everything but competition."

An important goal of the research was to identify candidate genes that could be responsible for the overly defensive behavior in Africanized honey bees.

"It will be a race among researchers to find out which specific genes are involved in behavior," he said.

Note: This story has been adapted from a news release issued by Texas A&M University - Agricultural Communications

Published Friday, December 22, 2006

Bee Losses Puzzle Experts

The spread of "dwindle" could threaten agriculture, food supply.

By KYLE KENNEDY Kyle Kennedy can be reached at kyle.kennedy@theledger.com or 863-802-7584.

Fort Meade beekeeper David Adams is facing a mysterious plight shared by his counterparts in Pennsylvania, Georgia, North Carolina and elsewhere: Their bee colonies are being decimated at an alarming rate, and the cause is unknown. Starting in mid-August, Adams lost a third of his 900 hives within the course of a few weeks. The seemingly healthy colonies just disappeared, he said, echoing reports from beekeepers across the country.

"It's become a serious problem for beekeepers, myself included," said Adams of Adams Honey & Pollination. "We're on the ropes." The phenomenon, termed "Fall Dwindle Disease," is discussed in a preliminary report published last week by researchers in Pennsylvania and Florida.

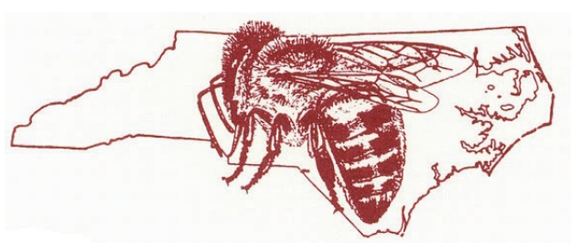
Seven commercial beekeepers interviewed for the report claimed hive losses ranging from 30 percent to 90 percent, and one beekeeper said he expected just nine of his 1,200 colonies to survive the winter. "Many beekeepers are openly wondering if the industry can survive," states the report, compiled by researchers from Pennsylvania State University and the Florida and Pennsylvania departments of agriculture. "There are serious concerns that losses are so great that there will not be enough bees to rebuild colony numbers in order (to) service the pollination needs and to maintain economic viability in these beekeeping operations," it said.

In addition to honey producers, fall dwindle poses a serious threat to a $15 billion pollination industry that supports the nation's fruit, nut and vegetable crops each year. Without honeybee pollination, the food supply could decrease by a third, according to the Florida Department of Agriculture, causing significant harm to citrus and blueberry production and virtually eliminating watermelons, cucumbers and squash.

Although bee experts have identified several possible culprits, a prevailing theory has yet to emerge on the source of fall dwindle. University of Florida professor Jamie Ellis said the disease might be the work of varroa mites, a pest of honeybees that transmit viruses... "It's a hodgepodge of factors that every few years seems to kill bees," said Ellis, an associate professor of entomology at UF. "It does seem to come in cycles, and it certainly seems to be getting worse." Fall dwindle can be likened to what has been called Disappearing Disease, a condition first reported in 1915, according to Ohio State University professor James E. Tew. The characteristics varied in each case, save for one similarity: A mysterious absence of adult bees in afflicted hives...

"It's really a head-scratcher as to what it is," said Bromenshenk, who has been noted for his work using bees to detect land mines and toxic chemicals. "We're doing detective work at the moment. Lots and lots of candidates, but no answers yet."

- Don Hopkins, State Inspector: (336) 376-8250
- Guilford County Beekeepers Association web site www.guilfordbeekeepers.org
- North Carolina State Beekeepers Association web site www.ncbeekeepers.org



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