### Remember...

No meeting in December.

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Turn in your renewal to Janice for your local and state membership.

Bring your favorite covered dish to the meeting on January 17<sup>th</sup> at 6:00



### JANUARY 2013 Newsletter of the Alamance County Beekeepers

## This month's meeting...

Dr. James T. Wilkes will be speaking on Hive Record keeping. The meeting will start at 6:00 and will be a covered dish at the Ag building on Thursday, January 17th.



# The Traveling Beekeeper -

# Colony Needs During Winter by Larry Connor

There is an enormous range of recommendations about getting colonies ready for winter. Some beekeepers recommend every colony have 90 to 120 lbs of stored honey and pollen to survive the winter, while others are able to winter colonies on just a fraction of that amount. Parallel to that is the overwintering of huge populations in large brood nests compared to those who winter bees in four and five frame nuclei. Some people winter colonies with no preparations, and others wrap their colonies in thick insulation materials. This contrast list goes on and on.

Part of this just reflects the adaptive nature of honey bee colonies, and their inherited ability to survive under a wide range of environmental conditions. There are variations on how different races and families of bees deal with wintering, with some with many adaptations for survival and others less fit for winter. The other factor, where you winter your bees, makes a big difference, too. If you have bees in an area where winter is only a few weeks long, your focus will be much different than the beekeeper in northern states and Canada who must prepare colonies for months and months of limited flight.

More and more beekeepers accept the reality that preparation for winter must start before the summer is officially over at the autumnal equinox. There are three focus points all beekeepers need to address at this time of the season: 1. The production of healthy 'winter' bees with optimal nutrition stored in their bodies, 2. The management or treatment of colonies against pests and diseases, especially varroa and tracheal mites and nosema, and 3. The colony must be provided with enough food to survive until the reappearance of natural food in the spring.



### Anticipate

Prior to the appearance of mite parasites in bee colonies in North America, many beekeepers felt that their biggest problems were American foulbrood and pesticide losses. For foulbrood many beekeepers used a calendar antibiotic treatment program to prevent the disease from appearing in their bees. At the same time a number were strongly against this approach, since the colonies were being medicated with an antibiotic that usually was not needed by the bees. That pretty well reflected the attitudes of the medical and veterinary professions before 1980.

With pesticide losses, beekeepers were far more likely to anticipate losses, and most commercial beekeepers either priced pollination rentals to include some bee losses, or they kept their bees away from the fields or orchards being treated with bee-killing insecticides. Small-scale beekeepers often did not know what killed their bees, and were quick to blame disease, swarming or starvation for bee losses rather than consider a pesticide exposure, unless it was so dramatic that it was hard to mistake for something else.

In this post CCD era, more and more beekeepers are PROACTIVE rather than reactive in their bee management. Rather than waiting for problems to develop and for bee colonies to die, more and more are focused on the sampling and testing of colonies for various problems. Last month I discussed Dr. Medhat Nasr's proactive testing for mites and nosema in Alberta, Canada. The beekeepers there are encouraged to treat only when necessary, and to treat in the correct manner.

All beekeepers should develop the habit of sampling for varroa mite levels. This is the premiere problem facing most beekeepers in North America, but this is often linked to other issues (hive-based pesticides, bee pathogens, and poor nutrition). Sampling methods range from the ether spray method, the double jar method shown in last month's column, or using a powdered sugar dusting to count the adult mites that are dislodged by the sugar and fall to a greased sampling tray.

Sampling is one thing, but knowing what the numbers mean is another. A beekeeper spoke of a mite drop of 40 mites. He said it was a natural drop (no powdered sugar or anything else was used), over a three-day period. He thought the number was low. I suggested that it seemed high to me, since I like to see less than 10 mites drop in 24 hours with a powdered sugar dusting. This is the challenge, isn't it? What do these numbers mean? It is frustrating that most of the time it is hard to get good advise on this.

For me, the lower the mite drop, the happier I am. I like to see well-chewed mites, ones with broken shells and torn legs. Get the hand lens out and take a look! Are your bees grooming the mites off themselves?

Here is what we can sample for in a proactive management plan: Varroa mites – as discussed above, we can use one of the sampling methods and make decisions based on local practices and recommendations.

Tracheal mites — A few dissections under a lower powered microscope will provide evidence of any possible tracheal mite problems. This is useful in the fall and winter, and during spring buildup.

Nosema — A higher powered microscope (compound scope) is needed to check the spore levels in bees, and this is beyond the finances of small beekeepers. But they should put pressure on State officials for testing, if they do not already provide this service.

General beekeeping awareness should dictate elimination of certain colonies with diseases. Colonies with American foulbrood should be quarantined, and local practices followed for treatment or destruction. Colonies with the general symptoms associated with Colony Collapse Disorder are probably not worthy of any effort to save. Colonies with PMS (Parasitic Mite Syndrome, a collection of symptoms that can include European foulbrood-like brood, K-wing, diminutive wing, and other virus-transmitted diseases) should be destroyed or put into an intensive treatment program with knowledge that few of these colonies can be expected to survive the winter period.

# Honey and Nut Glazed Brie

Makes 16 to 20 servings

Notes & Notices

- 1/4 cup honey
- 1 Tablespoon brandy
- 1/4 cup coarsely chopped pecans
- 1/4 oz. (about 5-inch diameter) Brie cheese

In a small bowl, combine honey, pecans and brandy. Place cheese on a large ovenproof platter or 9-inch pie plate. Bake in preheated  $500^{\circ}$ F oven 4 to 5 minutes or until cheese softens. Drizzle honey mixture over top of cheese. Bake 2 to 3 minutes longer or until topping is thoroughly heated. Do not melt cheese.

Serving Suggestion: Serve with crackers, tart apple wedges and seedless grapes

If you watch "The Big Bang Theory," you probably laugh every time Sheldon Cooper says the B-word: "Bazinga!"

Now, in one of those amusing science-imitates-art moments, "bazinga" has been officially dubbed a species of a bee.

The writers of the hit comedy probably never imagined that the persnickety physicist Cooper's favorite word would be immortalized in actual science.

But thanks to <u>a team of Brazilian biologists</u>, a Brazilian orchid bee is now known by the name *Euglossa bazinga*.

"The idea was to honor actor Jim Parsons and his brilliant interpretation of Sheldon Cooper," Dr. André Nemésio, a biology professor at the Universidade Federal de Uberlândia in Brazil told CNN.

"The show exaggerates a little bit, but in a sarcastic way, it shows how things do happen in the academic world," he added. "It is fantastic!"

Of course, it doesn't hurt that the name draws attention to these creatures.

"Many orchid-bee species inhabit forested areas that may soon vanish and, as a consequence, it is possible that the bees might disappear, too," Nemésio said.

"For many areas and many species, only a strong action from the society can reverse the extinction process. So, I think it is also a valid way to make people know about these wonderful creatures and the situation concerning their conservation status."

For his part, "Big Bang Theory" executive producer Steve Molaro responded in a press release: "We are always extremely flattered when the science community embraces our show. Sheldon would be honored to know that Euglossa bazinga was inspired by him. In fact, after 'Mothra' and griffins, bees are his third-favorite flying creatures."

Post by: CNN's Henry Hanks



### Feeding program

Even before the last of the late summer/early fall nectar is gathered, many beekeepers begin a protein feeding program with the goal of producing a large number of well-fed worker bees that will serve as the Winter Bees. By feeding, it is hoped that they will be 'Fat Bees', endowed with extra proteins, enzymes and other nutritional components needed for brood rearing during the winter. We fed protein patties from mid August to December in 2009, and the limited success we had in wintering bees (after an especially poor season) is credited to the feeding program. We fed thick sugar syrup (2 parts sugar to 1 part water) in division board feeders. The frame feeders with that had built-in chimneys to eliminate drowning certainly had an advantage over feeders with smooth or rough interiors. We want the protein to go into the bees, with any natural pollen being stored in the cells. When the nectar flow is over our minimum carbohydrate feeding goals are:

4-frame nucleus 3.5 frames of honey (or stored sugar syrup) 5-frame nucleus 4.5 frames of honey (or stored sugar syrup) 8-frame hive 7 frames of honey (or stored sugar syrup) 10-frame hive 9 frames of honey (or stored sugar syrup)

In late October or early November we re-evaluate the food storage levels of colonies and add extra frames of stored honey to those colonies that require them. We do not feed colonies with poor chances of wintering since there is no point if investing the time, feed and equipment in colonies that are sure to die over winter. A better plan is to combine a marginal hive with a strong hive, and let the bees sort out the best use for these themselves. Don't combine two weak hives, since they are still unlikely to succeed during the winter.

Many beekeepers medicate with Fumagillin as indicated by microscopic testing and spore counts. Follow the directions and use commonly accepted practices when using antibiotics in the hives. Keep records of the dosage, time and

#### frequency of treatment.

#### **Relocating hives**

Wind can be stressful and deadly to hives in the winter. While a ridge top may be a great place for bees to gather nectar during the summer, it may be lethal to colonies in winter. Move the bees to a wind shadow, where you and the bees can comfortably stand on a windy day. Avoid low and wet spots along lakes, rivers, streams, since they are likely to flood in winter and spring rains. Ask property owners how high the stream has flooded before you put bees into a winter location.

Some beekeepers group their nucs and single hives into groups of 2, 4, 6 and 8, depending on the design of the boxes and the pallets they are on during the rest of the season. The idea is to let each colony help the others out with some degree of heat sharing. They may wrap colonies, making sure each one has proper ventilation and flight openings.

\*\*\*\*\*\* If you want to read more of this article on wintering, go to the online American Bee Journal.

### ALAMANCE COUNTY BEEKEEPERS 2013 OFFICERS

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### Alamance County Beekeepers Program Calendar for 2013

Meeting Date	Speaker(s)	Presentation Titles
<b>January 17<sup>th</sup></b> 6:00 PM Covered Dish	Dr. James T. Wilkes, Department Chairperson Computer Science Appalachian State University	Hive Record Keeping: Hive Tracks and other methods of documenting bee yard activities.
<b>February 21<sup>st</sup></b> 6:00 PM Covered Dish	Dr. Jody Johnson, Ecotoxicology & Pollinator Research, Smithers Viscient, Snow Camp, NC	Systemic Pesticides - Do they impact our bees?
<b>March 21<sup>st</sup></b> 6:00 PM Covered Dish	Jennifer Keller, Apiculture Technician, Apiculture Program, Department of Entomology, NC State University	Queen Rearing (And special statement about when to add honey supers).
<b>April 18<sup>th</sup></b> 7:00 PM	Mike Ross, et al.	Swarm Capture & Prevention.
<b>May 16<sup>th</sup></b> TBA	Lewis Cauble, Master Beekeeper, Cedar Grove Bee Works, Cedar Grove, NC	Honey Presentation at the State Fair.
<b>June 20<sup>th</sup></b> TBA	Don Hopkins, Apiary Inspection Supervisor, North Carolina Department of Agriculture and Consumer Services	Honey Bee Pest Awareness.
<b>July 18<sup>th</sup></b> 6:00 PM	Apiary Program, North Central, NC Paul Jollay and Ira Poston	Honey harvesting & extraction in Alamance County, NC at the Lodge House in Glencoe.
August 17 <sup>th</sup> Saturday 3:00 PM	Don Moore, Don Hopkins, Apiary Inspection Supervisor, North Central, NC & Nancy Ruppert, Apiary Inspector, South Central, NC	Annual Ice Cream Social at Don Moore's with Hive Inspections by Don Hopkins & Nancy Ruppert
September 19 <sup>th</sup>	Dr. John T. Ambrose, Professor of Entomology, Distinguished Undergraduate Professor Emeritus & Dean Emeritus of Division Undergraduate Academic Program	Honey Standard – Background, Where we are and Where we would like to go.
October 17 <sup>th</sup>	Michael Simone-Finstrom, USDA Postdoctoral Research Fellow, Apiculture Program, Department of Entomology, NC State University.	Resin Collection: Propolis' uses in the hive.
<b>November 21<sup>st</sup></b> 7:00 PM	Three to Four Speakers TBA	New Beekeepers: Lessons Learned.
December 2 <sup>nd</sup>	Planning Meeting	Planning 2014 Meeting Topics

	Alamance County Beekeepers Membership Pay Form for 2013 (Dues expire December 31)	NewRenew
Name:	Dues \$6.00, State Dues \$15.00, Bo	oth \$21.00 \$
*Name:	Dues \$6.00, State Dues \$15.00, Bo	oth \$21.00 \$
* Name of second member for two-mem	nber family.	Total \$
Address:		
City:	State: Zip:	
Telephone:	* *Email Address: PLEASE PRINT ^	
Check here if address change	** Newsletter will be delivered	via e-mail If applicable
Please make checks payable to Alamar		
Mail Completed forms to:	(County - if of	ther than Alamance)
	Janice Foulks	
	2529 Johnson Lane	
	Burlington, NC 27217	