



# The University of Georgia

College of Agricultural and Environmental Sciences  
*Department of Entomology*



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**Editor: Jennifer Berry, Research Professional III**

**20<sup>th</sup> Annual Beekeeping Institute at Young Harris May 12-14<sup>th</sup>, 2011**



Twenty years ago the first Young Harris Beekeeping Institute opened its doors to folks eager to learn more about honey bees. Since that time the institute has tripled in attendance, becoming one of the most popular bee schools in the Southeast, not only for the beginner, but also for the more advanced beekeeper as well. Over the decades students have learned seasonal management, how to build hives, honey bee biology, and disease and pest control, to name just a few of the topics the Institute covers. International speakers have inspired us with workshops on encaustic art, mead making and how honey can win best-in-show. Since the Institute's inception, a Welch Honey Judge Certification Program and the first Georgia Master Beekeeping Program has been

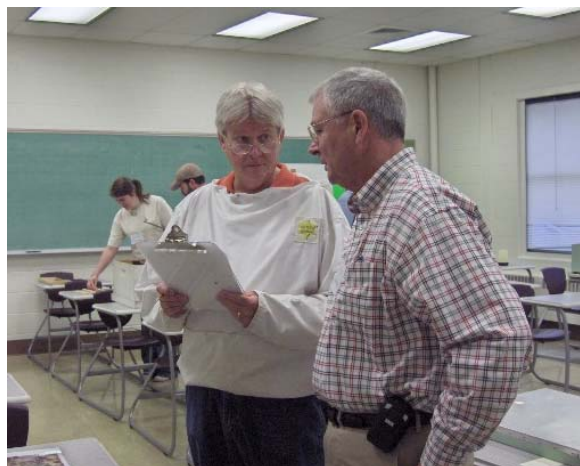
included. Since 1992 this annual event has been hosted by the UGA honey bee lab in cooperation with Young Harris College and the Towns County Extension Service.

Being our 20<sup>th</sup> year anniversary, this year's speaker lineup is superb. Participants will have the opportunity to learn about a whole host of topics from experts in the field. Our guest lecturers this year are Dr. Yves Le Conte, Dr. Debbie Delaney and Jerry Hayes. Dr. Le Conte has been a beekeeper since he was 12 years old and still, to this day finds these insects fascinating. In 1990 he landed a permanent position as a research scientist for INRA-Université d'Avignon et des Pays de Vaucluse (Joint Research Unit for Bees and the Environment) located in Avignon, France. Today, he is the research director and head of the Unit 'Abeilles et Environment. For 21 years his primary focus has been on honey bee pathology, pheromones and social regulations in honey bees.



Dr. Debbie Delaney has been working with bees, even running her own business, since graduating with her Bachelor of Science degree from Oregon State University. As a Masters level student, she explored the effects of coumaphos on drone honey bee sperm, and as a doctoral student her research investigated the genetic diversity of honey bee populations. She did her post doctorate work for Dr. David Tarpy at North Carolina State University. Currently she is an Assistant Professor at the University of Delaware. Her areas of emphasis are working on feral honey bee populations, Africanization, honey bee gut health and temporal stability of native bee populations.

Our final guest lecturer is Jerry Hayes, Chief of Apiary Inspections at the Florida Department of Agriculture and Consumer Services, a job he has held for 8 years. But Jerry wasn't always interested in honey bees. He was actually pursuing a different career when he became hooked and had to learn everything there was to learn about honey bees. He went back to school at OSU under the direction of Dr. Jim Tew, next worked for the USDA Lab in Baton Rouge, and then on to Dadant and Sons where he began writing the "Classroom" section for the American Bee Journal. Jerry is considered the regional expert on Africanized honey bees (AHBs). Since their 2005 confirmation in Florida and a recent death in Georgia, beekeepers and the public have had many questions about the implications of these bees, especially for the southeast.



Friday and Saturday will comprise the institute proper, with lectures and workshops by our guest lecturers and leading authorities on honey bees. Thursday is dedicated to training and certification examinations for the Georgia Master Bee Program (GMBP) Journeyman, Master, and Master Craftsman levels, as well as the Welsh Honey Judge qualifications. Training and certification for the GMBP Certified (beginner's) level are incorporated into the normal activities (highlighted in blue on the program) over Friday and Saturday. The honey judge program is

partnered with the Welsh (U.K.) National Bee Keepers Association to provide North America with the only licensing program for honey judges. Information about both programs is listed on our website: [www.ent.uga.edu/bees](http://www.ent.uga.edu/bees)

There are also fun optional activities, such as a competitive honey show. The honey show will include the typical classes for honey, along with categories for photography, art, candles, section comb honey, mead, and beekeeping gadgets. We strongly encourage people to enter the honey show even if they have never competed before. This is an excellent opportunity to have your entries judged by an international honey judge. Plus, accolades are given to the winners during the annual award ceremony on Friday.



Speaking of Friday night, there will be a low country boil at the Trout Lodge which overlooks a mountain stream. Along with the meal, Master Bee Program certificates will be announced. Registration is now open. Please go to our website at [www.ent.uga.edu/bees](http://www.ent.uga.edu/bees) and click on the Young Harris Bee Institute. If you are interested in attending, please don't wait. Space is limited, and for the past few years we have sold out early.



### **UGA Honey Bee Lab Welcomes New Crew**

This past year the lab crew has increased, with three new additions to our staff. First, Victor Ogundipe joins the lab as a MS student. Victor received his Bachelor of Arts Degree in Sociology from Georgia State University in 2007. In 2010 he finished his Master of Arts Degree in Sociology, again from Georgia State University. His passion for bees has encouraged him to further his education and pursue a MS in entomology. His particular areas of interest are honey bee social communication, bee breeding, and the use of eusocial insect societies as models for solving human challenges. Victor is an accomplished student and we are very pleased to have him at our lab.

Cindy Bee grew up with bees. Following in her father's footsteps, she eventually took over his operation. Once she moved to Atlanta, she began a business removing honey bees from structures, a business that lasted twelve years. This experience lead her to co-author a book titled *How to Remove Honey Bees from Structures*. Cindy is on the Board of Directors for the Metro Atlanta Bee Club, along with Georgia Beekeepers Association. In addition, Cindy is Georgia's first women Master Beekeeper. In 2006, Cindy was awarded Beekeeper of the Year by the Georgia Beekeeper's Association. She is currently working on a Master's Degree in Professional Writing and is collecting stories from beekeepers, age 70 and older, who have been keeping bees for more than 25 years. Cindy Bee joined our crew recently as a lab technician.



Philip Quinn is a side-line beekeeper from Atlanta where he produces and sells honey. He also collects swarms, removes bees from structures, performs apiary consultations, mentors and speaks to local and state groups. He is currently a GA-MBP Certified Journeyman Beekeeper through the UGA/Young Harris Bee Institute. He

is member of the Metro Atlanta Beekeepers Association, Georgia Beekeepers Association, Eastern Apiculture Society, and currently serves as the President of the Tara Beekeepers Association in Forest Park. At the bee lab, Philip assists in the apiary, helps to maintain and build equipment, and regularly performs supportive data gathering through field work and microscopy in the lab.

### **Australia Abandons Search for Asian Honey Bee By Alan Harmon**

The Australian government is abandoning the fight against the Asian bee incursion in the north of the country in a decision that could make the U.S. temporary ban on Australian bee imports permanent. The Asian Honeybee National Management Group (AHB NMG) decided it is no longer technically feasible to eradicate Asian honeybees (*apis cerana*). The AHB NMG is made up of the chief executive officers of the national and state and territory departments of agriculture and primary industries, representatives of the Australian Honey Bee Industry Council (AHBIC), Plant Health Australia and is chaired by the federal government.

Opposition agriculture and food security spokesman John Cobb accused the Labor government of gross negligence, saying the decision could potentially decimate the Australian bee industry and will have major public health implications. Government ministers stayed out of sight, leaving the announcement to a news release from the federal Department of Agricultural Forestry and Fisheries.

The Asian honeybee is an invasive species which adversely impacts populations of European honeybees by competing for floral resources, robbing managed hives and transmitting disease. It is a natural host for *Varroa jacobsonii*. The bees were first detected near Cairns in far north Queensland in May of 2007. A national cost-shared program aimed at eradication was implemented, led by the Queensland government and overseen by the AHB NMG. Some 342 swarms or nests



have been found and destroyed. None of the bees in the nests destroyed carried exotic mites of concern, such as *Varroa*, *tropilaelaps* or tracheal. The eradication campaign was funded by the Australian government, state and territory governments and the AHBIC at a cost of about \$3 million.

The AHB NMG's decision to give up the fight was based on a number of factors, including the tendency for the bees to swarm and breed rapidly, their ability to travel long distances, particularly with assisted movement on vehicles and trains, and the Australian government's limited surveillance methods, which have made it difficult to locate all nests to destroy them. The AHB NMG agreed to recommend continued funding for residual activities of the program until March 31. It was also agreed that a group of senior security officials should meet to determine whether any further national action is warranted.

Opposition spokesman John Cobb suggests the decision to end the program will have serious ramifications for Queensland and the rest of Australia. He has accused Minister for Agriculture Joe Ludwig of hiding behind department bureaucrats when, according to Cobb, he should have had the courage to stand up and make the decision himself. "Information coming from the Queensland government is that they are horrified by the decision, and rightly so," Cobb says. He notes that the Asian honeybee is a natural host for the *Varroa* mite and is a major threat to the Australian honeybee industry. "Asian honeybees also have an aggressive robbing habit, taking honey from managed hives and possibly causing hives to starve. There is now clear evidence that the Asian honeybee displaces native bees from their natural habitats by competing for floral resources," Cobb says. "One of the major concerns is the Asian honeybees' very aggressive nature, especially when protecting hives; and they are much more inclined to sting people. When cornered they will attack. This is especially a concern with the increased incidence of anaphylactic reaction in allergy prone people and will become a major health risk as the Asian honeybee spreads rapidly across the country. *Apis cerana* has shown an ability to colonize and

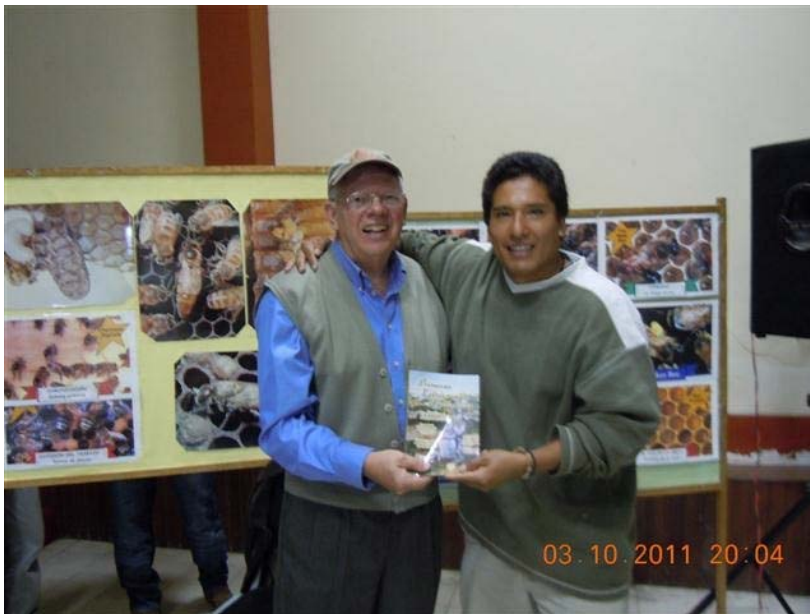
establish nests in a wide variety of locations and situations, including in cars, boats, boxes and machinery.”



Cobb says this allows rapid dispersal over potentially long distances through movement of infested vehicles or equipment. “The pest itself, however, has particular ramifications for Australia’s tourism industry,” he says. “The Asian bee becomes a pest in urban areas through establishing nests in houses, and because of its aggressive stinging behavior. It will also disturb native fauna, such as native bees, small marsupials and birds that nest in similar places. “There is a clear public good in the government continuing to fund the eradication

program, but despite concerns from the bee industry and the Queensland government, Minister Ludwig has just given up.” He says the government not only failed to protect Australian borders, but now also refuses to spend the money required to eradicate problems if they occur. “The agriculture minister is proving as uninformed as the former minister when he should be doing his duty to protect Australia from exotic diseases and pest incursions,” Cobb says.

**GEORGIA around the GLOBE - Where are they now?**  
**By Dewey M. Caron, Emeritus Professor University of Delaware**  
**dmcaron@udel.edu**



Nabor Mendizabal is alive and well in Bolivia. Nabor, as many Georgia beekeepers will recall, received his Masters degree in 2004 from UGA. During his time at UGA he studied genetic selection in honey bees, along with Small Hive Beetles. Following his degree Nabor did apiary inspections with Don Hopkins in North Carolina before returning to his native Bolivia.

**Nabor receiving Dr. Delaplane’s *First Lessons in Beekeeping* from Dewey Caron**

Nabor was an undergraduate student of the University Mayor de San Simon in Cochabamba,

Bolivia where he took beekeeping classes with Professor Julio Ledo, who several years ago came to the US to speak at an EAS meeting. Nabor did an undergraduate thesis on cultural control of *varroa* mites. Fortunately in Bolivia, *varroa* populations seldom become extensive, and pesticides are not required, so cultural control methods work reasonably well.

A native of Cochabamba, a high mountain valley of the front range of the Andes Mountains, home to over 1.5 million people (of a total country population of 9 million), Nabor has for the last two years been educating beekeepers in the Grand Chaco, a unique climate area of Bolivia extending into Paraguay. He continues to produce a variety of products with his bees (along with a brother and his father) and is establishing a queen rearing operation to sell selected Africanized bee stock to beekeepers, something sorely needed to enable beekeeping to progress in the country. In Bolivia, as in rest of South America (southern parts of Argentina and Chile are only exceptions), the only possible bee to manage is the Africanized bee.

Since my retirement from the University of Delaware, my wife and I live in Cochabamba, Bolivia, her hometown, for 4-6 months of the year. I found Nabor in Monteagudo, a part of the Chaco region of Chuquisaca Province, over 300 bone-jarring km on questionable roads from the ancient Bolivian capital and colonial city Sucre, south of the Cochabamba area. He is teaching beekeeping under a program SP DELA (Secretaria de Promoción de Desarrollo Económico Local Agropecuario), a program financed by an overseas aid program of Denmark. He also works with 6 beekeeping associations in the drier valleys of the Andes Mountain front range in a program known as PUMA (Fundación Protección y Uso Sostenible del Medio Ambiente) financed by Conservation International – a program that helps individuals finance their start-up costs of becoming beekeepers as a means of conserving the environment and biodiversity.

Nabor is working with over 800 individuals managing about 2000 colonies in the region, including communities of the native Chiriguano and Guaraní populations. He is providing the basics of how to begin (most capture swarms), improve stock and market products – honey is largely a medicine in Bolivia and not as important as a diet ingredient. Some of the associations are certified OECAS (Organizaciones Economicas Campesinas) to provide honey to a subsidized program, providing honey to mothers breast feeding new babies (subsidio de lactancia materna). They have been approached about providing a honey/propolis mixture to a student breakfast program, but there simply is too little honey available to supply this program at present in Bolivia. All bee products are organic in Bolivia, though some honey is sold, via Brazil, on the international market.

In addition to production issues and producing quality honey products (pollen, propolis, royal jelly), Nabor works with beekeepers, helping them to solve issues such as *varroa*, PMS (Parasitic Mite Syndrome), European foulbrood (there is apparently NO American foulbrood in Bolivia – at least none has ever been reported), ant control (nasty biting pests that make their nests under inner covers), poor queens, temperamental stock, and Tocolo (Oso u Hurón Melero), a night visiting mammal pest of bee colonies. If you are interested in learning more about any of these groups you can Google them to obtain more information, or contact Nabor at [nhmendizabal@hotmail.com](mailto:nhmendizabal@hotmail.com)

## Honey Production Up For the First Time in Years

With all the upsetting news flooding our airwaves these days, I thought some uplifting information about our bees would brighten the day. So here's some good news! Overall honey production in 2010 increased by 20% from the previous year (which was actually an all time low of 140 million pounds). Individual colony numbers were up 166,000 in 2010. The United States imported 252 million pounds of honey, which was a 41 million pound increase from 2009. Plus we exported 30.4 million pounds in 2010, compared to 29 million the year prior. Stockpiled honey still sitting in beekeeper's warehouses is at 45.3 million pounds, an increase of 8 million pounds over the year. Now let's calculate the per capita consumption of honey.

Honey In		Honey Out	
Imports	252 million lbs	Exports	30.4 million lbs
US production	176 million lbs	Stockpiled	45.3 million lbs
Honey on loan	4.1 million lbs		
Total	469.1 million lbs	Total	75.7 million lbs

Taking the amount of honey in minus honey out (469.1-75.7) which equals 393.4 million pounds of honey consumed in the US during 2010. Now divide that number by the US population 308.7 million people, which gives the per capita consumption, which is 1.27 pounds, or 20.4 ounces per person for the year. In the past 25 years that number has not increased or decreased more than an ounce or two. Which doesn't seem like much. But to top things off, 54% of the honey consumed in this country is imported. Maybe not the best ending news, but at least it started out good.

### Management Calendar: April - June in Georgia



Even with a colder than average winter, spring once again sprang into action weeks early with day temperatures actually approaching summer highs. This allowed not only the early varieties to bloom ahead of schedule, but the later ones as well. What does this mean for the bees? A flood of nectar all at once. And what happens as brood nests are compacted with brood and little to no cells are available for this nectar? Swarms! If you are one of those nutty beekeepers, like myself, and don't

enjoy seeing your colonies hanging from the nearest tree limb, then here are a few tricks that may, (not guaranteed) but just may help to keep those girls in the hive. However, once they are in "swarm mode" there's little one can do to prevent them from hitting the trees. The picture below is our past post doctorate Ohad Afik standing next to a huge swarm last spring.

Over the years we have tried all sorts of methods here at the lab and have found one that seems to work the best: creating an artificial swarm by splitting the colony. But you need to do this sooner than later. If the population is booming and there are queen cups being constructed, it is time! You will need a nucleus colony (nuc) or a 10-frame hive, filled with frames along with a jar of 1:1 sugar syrup. From the parent colony remove one frame of open brood, one with sealed brood, one frame of nectar/pollen and the old queen. Gently place these frames into the new hive body. This totals three frames, so you will need to add additional frames (drawn or foundation) to fill in the spaces. In the parent hive, replace the three frames you removed with frames (again drawn or foundation). But remember not to separate the cluster with empty frames. It is still too early weather-wise. If you encounter any queen cells on the frames going with the new split and the old queen, make sure to remove them. If you see cells in the original colony, leave those for the next generation unless you have thought ahead and ordered a mated queen. Next, it is a good idea to take the nuc a good distance from the parent colony. Most of the bees will stay with the queen and the brood; however, you may lose the older bees once they begin to forage (they will fly back to the original colony). Even though there is a modest nectar flow occurring you still need to feed the new colony at least a quart of 1:1 sugar syrup. It will take them several days to figure out their new coordinates, meanwhile not collecting nectar, but still consuming food.



If you used a nuc box, remember they are still susceptible to swarming if they are not provided with plenty of space. Move them into a 10 frame box sooner than later, and once populations begin to fill the box, add honey supers. However, depending on the quality of the old queen, she may be replaced no matter what you do.



Another trick to keep a colony from swarming is to go out every six days and cut queen cells. This is very time consuming, as you have to check every frame thoroughly. If you miss just one, out the door they go. Remember, swarming is the colony's way of reproducing, and it's hard wired into each and every bee. It is also a way for the colony to reduce mite populations and possibly eliminate disease. But as beekeepers we want to keep as many bees in the box in order to produce as much honey as possible.

Speaking of honey, April and May could potentially offer up a bumper crop of nectar, along with a booming population of bees. But once June rolls around the nectar flow begins to taper off, eventually stopping completely in the Piedmont region of Georgia. Now you have a box full of bees with little for them to do. But not to fear, there is still nectar to be found. The northern mountainous region has sourwood honey and the southern half of the state has cotton blooming, along with numerous other cultured crops. Take advantage of all these different nectar flows if you have the opportunity. Not only will it expand your honey supply, but you'll be able to enjoy other parts of Georgia as well!

Have a wonderful Spring!

## How to Get Georgia Bee Letter

GBL can be received electronically by emailing your request to Jennifer Berry at [jbee@uga.edu](mailto:jbee@uga.edu)

### Regular Meetings

Bartow Beekeepers Association <a href="http://www.bartowbeekeepers.com/#/">www.bartowbeekeepers.com/#/</a>	7:00 pm, third Tuesday	Bartow County Extension Office, (behind the Cartersville Public Library)
Chattahoochee Valley Beekeepers Association <a href="http://www.chattahoocheebeekeepers.com">www.chattahoocheebeekeepers.com</a>	7:00 pm bimonthly (beginning January), second Monday	1/2011: Columbus State Univ. (Lindsey Creek Rd. & College Dr.) 3/2011: Oxbow Meadows Nature Center, Columbus
Cherokee Beekeepers Club <a href="http://www.cherokeebeeclub.com">www.cherokeebeeclub.com</a>	7:00 pm third Thursday	Cherokee Arts Center, Canton
Coastal Empire Beekeepers Association <a href="http://www.cebeekeeping.com/contact.htm">www.cebeekeeping.com/contact.htm</a>	6:30 pm second Monday	1026 Quacco Road, Savannah
Coweta Beekeepers Association <a href="http://www.cowetabeekeepers.org/">www.cowetabeekeepers.org/</a>	7:00 pm second Monday	Asa Powell Sr. Expo Center, Newnan, Georgia
Eastern Piedmont Beekeepers Association <a href="http://www.easternpiedmontbeekeepers.org">www.easternpiedmontbeekeepers.org</a>	7:00 pm first Monday	UGA Bee Lab, 1221 Hog Mtn Rd, Watkinsville
Forsyth Beekeepers Club <a href="http://forsythbeekeepersclub.org/Forsyth_Beekeepers_Club/Home.html">forsythbeekeepersclub.org/Forsyth_Beekeepers_Club/Home.html</a>	6:30 pm fourth Thursday	Sawnee Mountain Preserve Visitor Center, 4076 Spot Road, Cumming, GA
Henry County Beekeepers <a href="http://www.henrycountybeekeepers.org">www.henrycountybeekeepers.org</a>	7:00 pm second Tuesday	Public Safety Bldg., 116 Zack Hinton Parkway South, McDonough
Heart of Georgia Beekeepers Association	7:00 pm third Tuesday	Old Perry Court House, Perry
Metro Atlanta Beekeepers Association <a href="http://www.metroatlantabeekeepers.org">www.metroatlantabeekeepers.org</a>	7:00 pm second Wednesday	Atlanta Botanical Garden, Atlanta
Mountain Beekeepers Association	7:00 pm first Tuesday	Mountain Regional Library, Young Harris
Northeast Mountain Beekeepers Association	7:00 pm second Thursday	Northeast Georgia Regional Library, Clarksville
Northwest Georgia Beekeepers Association <a href="http://www.northwestgeorgiabeekeepers.com">www.northwestgeorgiabeekeepers.com</a>	7:00 pm second Monday, Jan - June & Sept	Walker County Agric. Center, Rock Spring
Oglethorpe County Bee Club <a href="http://www.ocbeeclub.org">www.ocbeeclub.org</a>	7:00 pm, third Monday	Oglethorpe Farm Bureau Building
Southeast Georgia Beekeepers Association	7:00 pm fourth Tuesday, Aug-March	Contact Ben Bruce 912-487-2001
Southwest Georgia Beekeepers Association	7:30 pm last Tuesday, even months	Swords Apiaries. Moultrie
Tara Beekeepers Assn (Clayton Co. area) <a href="http://www.tarabeekeepers.org">www.tarabeekeepers.org</a>	7:00 pm third Monday	Kiwanis Room, Georgia Power Bldg, 752 Main Street, Forest Park
Troup County Association of Beekeepers	7:00 pm, third Monday	4-H Ag. Bldg. on Hwy 27 at Vulcan Rd.

### Beekeeping Subscriptions

<i>American Bee Journal</i> , Hamilton, Illinois, 62341	217-847-3324
<i>Bee Culture</i> , 623 W. Liberty Street, Medina, Ohio, 44256	330-725-6677
<i>Bee World</i> , IBRA, 16 North Road, Cardiff, CF10 3DY, U.K.	
<i>The Speedy Bee</i> , P.O. Box 998, Jesup, Georgia, 31598-0998	912-427-4018

### Resource People for Georgia Beekeeping

For a complete listing of resource people and associations please go to  
<http://www.ent.uga.edu/bees/associations.html>