

African Honey Bees In Georgia

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A Tragic Event Is The First Chapter In this Evolving Story

On October 11, 2010, Mr. Curtis Davis, 73, was clearing a portion of his property in Dougherty County, Georgia, when he disturbed a colony of Africanized Honey Bees (AHBs). According to an eyewitness, the blade of the bulldozer Mr. Davis was operating scraped against an abandoned house column, splitting it open. Within seconds a cloud of bees swarmed out of the column surrounding both the bulldozer and Mr. Davis. He was able to exit the dozer and run, however the bees stayed in pursuit. He collapsed about 100 yards from where the hive existed. The coroner believed Mr. Davis probably died of cardiac arrest brought on, of course, by the stinging incident.

At first, emergency responders were unable to approach Mr. Davis due to the number of bees in the vicinity stinging everything that moved. Hence, the fireman quickly donned protective gear in order to retrieve Mr. Davis. Shortly afterwards, a local Georgia Certified Master Beekeeper, Dale Richter, arrived at the scene and even at a distance of over 200 yards, he too was being stung. He attributed the extraordinarily aggressive behavior to the facts that there were numerous piles of burning debris set by Mr. Davis, the bulldozer was still running next to the colony, plus fire trucks and other emergency response vehicles were in the area. Bees, of any background, are easily agitated by large, loud, vibrating machinery. It was determined that the bulldozer needed to be shut off

before any investigation of the scene could occur.

Dale approached the bulldozer without a veil, (his and extras passed out to the emergency crew) and with the help of an EMT, finally turned it off. While doing so, he noticed a two-pound ball of bees clustered in the corner of the cab just a few feet from his exposed head and face. The bees paid no attention to what he was doing. Next he found the exposed colony at the edge of the bulldozer blade with only a few bees remaining. After samples were collected

the bees were exterminated.

Samples of the bees were sent to the USDA lab in Gainesville, Florida for examination and identification. The bees tested positive for Africanization. This was the first case of AHBs being officially identified in Georgia. Along the east coast, AHBs are established in South Florida with occasional incidences flaring up North of Tampa Bay, however before this incident, not this far north. Barry Smith, Georgia State Inspector, immediately began to set up trap hives within a two-mile radius from where the accident occurred. He also started collecting samples from nearby colonies within the perimeter to be analyzed.

It is still unclear as to where these bees came from. However, once the initial shock of the tragic scenario began to lessen some interesting facts surfaced raising a few questions. According to Curtis Simmons, who was with Mr. Davis on the day of the attack, Mr. Davis and a neighbor had cut a portion of the column full of bees from his house back in April and had transported it to the dump site several miles away – the same location where the incident occurred. They wore no protective gear and never received a first sting. So, was this the same colony that attacked Mr. Davis, or was it later usurped by an Africanized colony, or was it just the time of year?

Once the results of the second set of samples were back the Georgia Department of Agriculture released the following statement commenting on the additional AHB



The bulldozer and the trash.



Comb in the remains of the column.

discovery from the colonies sampled several miles from the initial site.

Since this tragic event, The Georgia Department of Agriculture has been monitoring bee swarms, trapping and testing suspect bees. Testing of more than 90 samples identified two more colonies in the southern half of the state near the first confirmed colony. “The bees could have come from almost anywhere” said Agriculture Commissioner Tommy Irvin. “It is unclear how Africanized honey bees arrived in Dougherty County.”

Africanized bee swarms are occasionally found on cargo ships coming from South or Central America. A container from one of these ships could have been transported via rail or truck from almost any seaport. Some beekeepers from other states winter their bees in Georgia. Some commercial beekeepers that produce honey or pollinate crops move their bees to California, Florida, Texas and other states where Africanized honey bees are established. Finally, a beekeeper in the area could have purchased bees or queens that had African genes from a commercial beekeeper in another state.

“The important thing to keep in mind, says Irvin, is that other states and countries have learned to live with Africanized honey bees. We need to move beyond the hype of ‘killer bees.’ Just as we have learned to live with fire ants and rattlesnakes, we will learn to take certain precautions when in areas where Africanized bees may be established.”

Both the Georgia Department of Agriculture and the University of Georgia stress that beekeepers are the best defense Georgians have against Africanized honey bees. Without responsible beekeepers managing hives in the area, the density of docile European bees will decrease, leaving that area open to infestation by Africanized bees. Removing managed bee colonies is equivalent to “abandoning territory to the enemy.” Only beekeepers have the knowledge and resources to maintain high densities of European bees that can genetically dilute Africanized populations.

“Because of the fear that accompanies the arrival of Africanized bees, some groups and even lawmakers may want to ban beekeeping in their city or county. These actions have taken place in other states and the result has

been the same – it benefits Africanized honey bees rather than protecting a community,” says Dr. Keith Delaplane, Professor and Program Director of the University of Georgia Honey Bee Program.

Although budget cuts have affected the department’s ability to offer services, Georgia agriculture officials are evaluating how to best monitor for Africanized honey bees in 2011 but plan to resume trapping in middle to late February when bees become more active.

Georgia is a major queen and package bee producer. In 2007, agriculture officials in Alabama, Florida, Georgia, and Mississippi worked together to develop Best Management Practices (or BMPs) for commercial beekeepers in effort to preserve European genetics. The Georgia Department of Agriculture recommends that commercial queen and package beekeepers consider adopting these BMPs. Georgia Agriculture officials recommend that hobbyists purchase bees and queens from licensed beekeepers that have taken steps to preserve the European honey bee traits.

Africanized honey bees are a sub-species of the more gentle and well-known European honey bee which is responsible for pollinating crops and producing honey. To the untrained eye, AHBs are similar in size to European bees, however there are subtle physical differences. These bees are capable of inter-breeding with European bees, thus passing on the more aggressive AHB gene. Behaviorally, they are extremely defensive and respond to provocation by pouring out of their hive in large numbers and stinging anything in their path. They are also more difficult to manage because of the frequency in which they swarm and their flighty, nervous behavior. Most fatalities in the U.S. have been the result of colonies being disturbed by heavy equipment such as tractors.

In 1990, AHBs’ first introduction into the U.S. was complete when they crossed the border from Mexico into Texas. Once in the U.S., AHBs headed west towards California, initially sparing states east of Louisiana. Their movement was closely monitored and beekeepers in Georgia felt somewhat safe from an eastward invasion. However, we weren’t looking to our South. In 2005 established populations of AHBs were confirmed in Florida. Since that time the Georgia Department of Agriculture and the UGA Bee Lab have been planning for their arrival, putting together best management practices along with training sessions for emergency personnel across the state. We knew it was only a matter of time before a confirmed case of AHBs would be discovered in Georgia.

At this point educating the public has become a priority. following is a list of the most important things to be aware of:

1. Be cautious around places where Africanized bees are likely to nest, such as abandoned sheds, bee hive equipment, discarded tires and subterranean cavities.
2. If you are attacked, **run away**. You may think this sounds silly, but experience has taught us that people do NOT run away. Instead, they stand and swat, which simply escalates the defensive frenzy until it reaches lethal proportions.
3. Get inside a closed vehicle or building as fast as possible, and **STAY** there. Do not worry if a few bees follow you inside. Here’s another hard lesson we’ve learned: People do NOT stay inside a closed vehicle if a few bees follow them inside. Instead, they panic and flee back

outside where tens of thousands of angry bees attack them. Maybe it's a bizarre form of claustrophobia, but this pattern has repeated itself over and over in the stinging incidents we've monitored in Latin America and the Southwest U.S. Get inside. Stay inside.

4. European bees and local beekeepers are our best defense against AHBs. In response to Africanized honey bees, some communities may consider zoning restrictions against all forms of beekeeping. This essentially cedes territory to the enemy. Only gentle European bees can genetically dilute the defensive Africanized variety, compete with them, and minimize their local impact.

This last statement is of the utmost importance for beekeepers and needs to reach as many non-beekeepers as possible. Prior to the stinging incident back in October, Fayetteville's City Council voted to restrict beekeeping in the county. From now on, beekeepers must have five consecutive acres of land in order to maintain hives. Hence, your typical backyard beekeeper is banned.

But here's yet another problem: disagreements that flare up between people. Unfortunately, when neighbors and beekeepers clash it's usually the beekeeper that suffers. The most common complaints voiced by non-beekeepers are bees in pools, birdbaths, hot tubs, dog bowls, and birdfeeders, or the ever popular "bee swarm," which is of course going to kill the children. If the neighbor doing the complaining doesn't see results, or even worse, has it out for the beekeeper to begin with, the bees become the tool the neighbor uses to "win." Classic example: Neighbor one, who lives two sub-divisions away, is upset with neighbor two, the beekeeper. Neighbor one can't settle with neighbor two, so he decides to complain about the bees, (even though he lives two sub-divisions away). He takes his complaint to the city council and just like that the city of Suwanee banned beekeeping in the city limits. Neighbor one wins and neighbor two has to move the bees.

So what protection is available for the beekeeper? Not much, according to Mike Evans, Division Director for the Georgia Department of Agriculture. "There is a statute in place in the state of Georgia, §2-14-41.1, which is somewhat confusing. There are two sentences in this section. The first bars counties, cities, and other political subdivisions in Georgia from prohibiting beekeeping. However,

the second sentence of this section seems to contradict the first in that it states "This Code section shall not be construed to restrict the zoning authority of county or municipal governments." These statements seem to contradict each other. While this statute seems like a good idea, the Department does not have statutory authority to enforce any zoning restrictions or regulations. Although §2-14-41.1 is included with statutes the Department does enforce, it is my understanding that we are not empowered to enforce this particular section."

There was yet another concern that surfaced once we heard about Mr. Davis: the media. Phones started ringing across the state to any person associated with bees, experienced or not, as soon as the press got wind of what happened. If you have ever dealt with the media first hand, it can be a very frustrating experience, especially when they misquote you, or interpolate, or just get the facts wrong. Not only do you sound like an idiot, but worse, the wrong information is being passed along and can be circulated from paper to paper for years, decades even. The printed word can last forever.

When I first started my job a local newspaper called and wanted to interview me for a story about, what else, honey bees. A reporter and photographer showed up the next day and began the interview. At first I was a bit nervous, but as the clock ticked on, I began to relax. By the end of the day I felt like this reporter was my new best friend. She told me the story would appear in the Sunday issue. I was very excited. That Sunday the paper arrived and there I was, front page. But my excitement soon turned to horror as I made my way through the article. It was all so wrong.

She wrote about how drones collected the pollen and water and the queens collected the honey. And the queens needed to mate with the drones at least once a week in order to continue laying eggs and honey is created by the plants. She quoted me saying "Nosema mites attach themselves to the drones and get passed from hive to hive" and American Foul Brood is a very serious "beekeeper" disease and one has to take antibiotics if you're exposed. Really? She didn't seem drunk when we did the interview, so what happened? I just prayed my boss would never, ever get a copy.

As far as the first round with the media dealing with the discovery of AHBs in Georgia, it wasn't too bad. Once the samples came back positive, we had only a few hours to get our ducks in a row before the information was released to the press. Calls were made to give everyone and anyone associated with bees in Georgia the correct information and a heads up. The worst possible scenario was to be caught off guard when you hear on the other end of the phone, "Hello, this is Ted Franklin with channel 5 action news. Can we come out to your house and film Africanized Bees for the six o'clock news?"

Everyone did a great job, especially Dale Richter, our bee representative in Dougherty County. We kept the "killer bee" scenario to a minimum and stressed and will continue to stress the importance of bees and beekeeping in our state. And with any luck, AHBs will find our winters too cold and will head back south.

See Ya! **BC**

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