

Frequently Asked Questions about the Africanized Honey Bee in Florida¹

M. K. O'Malley, J. D. Ellis and A. S. Neal²

- ***What's the difference between Africanized honey bees (AHBs) and regular bees?***

Not much! The “regular” honey bees that beekeepers manage (European honey bees) are actually a little larger than the AHB. The most notable differences are the AHB's propensity to nest basically anywhere—including close proximity to humans—and the AHBs' increased defensiveness. All honey bees are defensive; that means if a colony is disturbed, bees will come out of the hive to defend against the possible intruder. European honey bees will send out 5-10 bees to defend an area about 20 feet around the colony, but if an AHB colony is disturbed, it may send out several hundred bees to defend an area up to 40 yards around the colony.

- ***Is it possible to tell an African honey bee from a regular or European honey bee by looking at it?***

No. The size difference is very subtle. The only way to be sure is via laboratory testing. The Florida Department of Agriculture and Consumer Services uses a system called FABIS: the **f**ast **A**frican **b**ee **i**dentification **s**ystem, which is conducted at one of their labs. The bee samples they test are usually sent in from feral (or wild) colonies that have been eradicated. If a bee's identity remains questionable after FABIS testing, FDACS will use the USDA-ID test (a more comprehensive morphological test) to confirm the bee's identity.

- ***I watch nature programs on television; does this qualify me to be able to tell the difference between AHBs and EHBs by looking at them?***

No. The only visible difference is the size, and AHBs are only 10% smaller—it is nearly impossible to tell without the help of lab tools and specific measurements.

- ***Is the Africanized bee the same as the killer bee?***

“Killer bee” is the name given to the Africanized bee by the media and Hollywood. The sting of an Africanized bee actually contains less venom than that of a European bee. However, Africanized bees have caused human and animal fatalities as a result of their heightened defensive characteristics (thus more stings from more individual bees), so it is important to carry a healthy respect for AHBs.

- ***What's the difference between African and Africanized bees?***

Technically, African refers to the pure race of bees that live in Africa. Africanized refers to the hybrid that results from African and European bees mating. The terms are often (though not always correctly) used interchangeably. AHBs in Florida are probably mostly Africanized although the only way to be sure is via laboratory testing.

- ***Do Africanized bees hunt people down and kill them?***

1. This document is ENY-140, one of a series of the Entomology and Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date September 2007. Reviewed April 2012. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

2. M. K. O'Malley, extension assistant, J. D. Ellis, assistant professor, Entomology & Nematology Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611 and A. S. Neal, extension agent, St. Lucie County, Ft. Pierce, FL.

No, the only thing they hunt for is pollen and nectar from flowers. However, if an AHB colony is disturbed, the bees will defend their nest.

- ***Do Africanized honey bees produce honey?***

Yes. AHBs are honey bees and do produce honey. However, they are not easily managed in Florida because of their defensive characteristics.

- ***How many times can the Africanized honey bee sting?***

All female worker honey bees can only sting once. A portion of the abdomen remains with the stinger when she flies away, and she dies soon afterward. The male honey bees (drones) cannot sting.

- ***What exactly is a swarm of bees? Is it dangerous when bees do this?***

Most people use the term “swarming” to refer to dangerous bee activity or just bees flying around; however, this is a misnomer. Swarming is bee reproduction at the colony level. When a colony swarms, the queen leaves the colony along with about 60% of the bees while the remaining colony members produce a new queen. The cluster of bees (or swarm) that left the colony begins a search for new nesting sites. *Swarming* is actually the cluster moving from its previous colony to a holding area until the bees find a home. Bees in swarms are generally docile and not defensive as they do not yet have a nest to protect. Despite this, swarms should be removed because they will soon establish a colony and exhibit defensive behavior.

- ***What should I do if I see a swarm of bees?***

First, stay away from the bees. Even though a swarm is usually docile, honeycomb construction may be starting (thus a colony being established and defensive behavior being exhibited) underneath the bees. Second, contact a PCO that handles bee removal.

- ***If I swat at a bee, will it go away?***

Swatting is not a good idea because it will agitate the bee and cause it to sting more readily. Also, if the bee’s body is crushed by swatting, it produces an odor (or pheromone) that incites other bees to attack the possible culprit.

- ***What is a PCO?***

PCO stands for pest control operator. A PCO is a professional pest control company; many PCOs offer bee removal

services, yet some do not. Certified PCOs are the only people according to Florida law that are allowed to apply pesticides to honey bees, so if you are having a honey bee issue, contact a PCO.

- ***Is it true that African bees are wild bees and can never be managed by beekeepers?***

No. In South America and Southern Africa, African bees are managed by beekeepers; however, this poses a problem in Florida because most bee yards are in closer proximity to humans than they are in South America. African bees will live anywhere regular European bees will live. It is illegal for Florida beekeepers to knowingly keep African honey bees.

- ***There’s a beekeeper near my property/house; how do I know he or she does not have Africanized bees?***

Recently, Florida’s beekeepers have been given 10 guidelines (called the Best Management Practices) that if practiced will ensure their bees to be European. If the beekeeper is following the BMPs, then he or she is not keeping Africanized bees, but if the BMPs are not being followed, there is no way to be sure. If you know a beekeeper, encourage him or her to comply with the BMPs. Also, registered beekeepers have their hives checked annually by the state inspectors. Defensive colonies are recommended to be re-queened to ensure that the bees are European.

For further information, visit the AFBEE Program website at <http://entnemdept.ifas.ufl.edu/afbee/>, visit the Solutions For Your Life website at <http://solutionsforyourlife.ufl.edu>, or contact your local county extension agent.