

THE DIFFERENCE BETWEEN EUROPEAN HONEYBEES AND AFRICANIZED HONEYBEES

You may have heard that Africanized honeybees are in Charlotte County and are sometimes encountered throughout the area. Domesticated European honeybees are present in commercial beehives that pollinate our crops and make our honey. Unfortunately, almost all feral (wild) hives in our area are now probably Africanized. Living and working safely among these bees is something that everybody needs to understand. Knowing the difference in the behavior and habits of these visually indistinguishable types of bees is crucial.

At a glance, both the European honeybee and the Africanized honeybee look the same and are in fact the same species. However, when we examine the behavior of these two subspecies, there are some stark differences. The domesticated European honeybees for example are relatively “gentle” due to years of breeding by beekeepers. They will still defend their hive if an invader comes within 20 feet, but will only send out ten to 20 guard bees to potentially sting an invader remaining upset for one to two hours. Europeans will chase you for only about 30 yards before breaking off the attack. On the other hand, Africanized honeybees may send out hundreds of guard bees to attack an invader as close as 40 yards away. An Africanized hive is capable of stinging up to 10 times more than Europeans and remains defensive for several days. Keep in mind that Africanized honeybees will chase you for up to 300 yards! All honeybees can only sting once. Africanized honeybee stings are not more toxic than Europeans; they simply are more aggressive increasing the chance of more individual stings.

European honeybees are also known to only swarm one or two times a year. Swarming is a process when a hive divides and splits off to form a new hive elsewhere. European swarms are large and they rarely all leave the hive, just a portion. Africanized honeybees can swarm 10 or more times a year. Their swarms are smaller (the size of a softball) and

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- (1) A honey bee colony that has been removed from a water meter box. (2) A swarm of bees in the branches of a tree. (3) Bees on a palm frond that have started building comb.



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are known to abscond which means that they abandon their original hive and relocate the whole colony to a new site.

European and Africanized honeybees also have different nesting site preferences. Europeans make large hives comparable to 10 gallons in size. Europeans also prefer nest cavities well above ground in a clean and dry location. On the other hand, Africanized honeybee hives are much smaller - around two-gallons in volume. They are known to select underground sites such as water meter and valve boxes. Other sites may include abandoned tires, stored building materials birdhouses and debris. Their nests may also be completely exposed hanging from a tree branch.

If you discover a feral Africanized honeybee hive on your property, never try to control it yourself! Not

only could you get seriously injured, but neighbors and passersby may also be attacked by a disturbed hive. Studies have shown that wasp and hornet sprays actually magnify the honeybee's aggression and intensifies the attack. Have them destroyed by a Certified Pest Control Operator who has had trained in African honeybee control. If you accidentally disturb an Africanized honeybees hive, run! Get into your car or house. Don't try to elude them by jumping into water as they will wait for you.

Keeping things in perspective, honeybees are crucial pollinators and honey makers that benefit us all. However, Africanized honeybees are aggressively dangerous and that deserves our respect and awareness. Just like any potentially dangerous wildlife whether it is a venomous snake or spider, knowing the characteristics of Africanized honeybees and how to deal with them will pay off with a safer community environment. This article briefly gives some important information on this insect, but I invite you to discover more details at <http://entnemdept.ifas.ufl.edu/afbee/>, the UF/IFAS African Honey Bee Extension and Education Program or AFBEE website.

Resources:

- *The Differences between European and African Honeybees: A Fact Sheet* (2009) UF/IFAS Extension Service, African Honey Bee Extension & Education Program & FDACS, Division of Plant Industry.
- O'Malley, M.K. & Ellis, J.D. (2008) - *Living with African Bees in Florida's Outdoor Workplaces*. UF/IFAS Extension Service.

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For more information about our Florida Yards and Neighborhoods Program, please contact our FYN Horticulture Program Assistant Allison Turner at 764.4351 or email Allison.Turner@CharlotteFL.com.

Allison can help educate you about the FYN Program so you can create a beautiful, Florida-Friendly landscape that saves you time and money while conserving precious water resources and reducing pollution.

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Plant Clinics around the county:
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