

Africanized Honey Bees: Protect Your Home and Your Horse
Amanda M House, DVM, DACVIM
University of Florida, Gainesville, FL

At least one horse has reportedly died as a result of Africanized bee stings in Florida. Africanized honey bees (AHB) are extremely aggressive and are frequently referred to as “killer bees”. They were first identified in the United States in 1990 in Texas. Since then, Africanized bees have spread throughout most of the Southwest and many parts of Florida. Honey bees are not native to North America, and were originally introduced with the European Honey bee (EHB). European honey bee colonies are vital to agriculture and healthy crop production in Florida. Honey bees are responsible for an estimated 1/3 of the world’s food production through their pollination. Citrus, clover, and Alfalfa are all pollinated by bees in Florida. Unfortunately, our domesticated honey bee, the European honey bee (EHB), is being threatened by wild populations of Africanized honey bees. Africanized bees can enter existing European honey bee colonies and kill the queen, thus taking over the nest. Wild breeding between EHBs and AHBs results in Africanized bee populations.

Africanized bees were originally imported to Brazil in the 1950’s. The AHB was thought to be a superior honey producer and pollinator in tropical environments, and their aggressive behavior was not well understood. Some of these AHBs were accidentally released and subsequently spread throughout Central and South America and Mexico. Africanized honey bees were first identified in Florida in 2002 in the Tampa Bay area. Africanized bees are significantly more defensive and aggressive than European honey bees, and respond quickly to disturbances caused by people or animals up to 50 feet or more from their nest. Africanized bees can sense vibrations from power equipment like lawn mowers 100 feet or more from their nest. They are easy to provoke and will chase a perceived threat (people or animals) up to .25 mile. Africanized bees swarm more frequently than European honey bees due to a higher rate of reproduction. They sting in very large numbers (hundreds), but like EHBs, each bee can only sting once before it dies. Since visually the bees look the same, DNA testing is required to identify AHBs from EHBs.

Since EHBs and AHBs cannot be differentiated visually, it is important to treat all bees cautiously and call an exterminator if bees are found on your property. **DO NOT ATTEMPT TO EXTERMINATE** bees yourself. It is important to be aware of potential nesting sites, and remove them from your farm and/or yard. Nesting sites may include exterior walls and eaves, buckets, cans, empty boxes, old tires, empty containers, underground animal burrows, tree trunks, low lying shrubs, under decks or areas under sheds or buildings. To protect your family and your horses, always inspect for potential nesting sites once or twice weekly in the spring through fall. Any opening larger than 1/8 inch should be sealed. Screens should ideally be placed over rain spouts, water meters, cavities in trees or fence posts, and vents. Inspect barns and sheds carefully and thoroughly prior to using lawn mowers or power equipment. Examine the barn and turn out areas prior to bringing your horse up or placing it on cross ties. It is important to always listen for buzzing and look for bees entering or leaving an area, which may indicate a nest or swarm. A swarm or nest of bees should never be approached.

If bees are located on your property, call a local beekeeper, pest control agent, or Cooperative Extension Agent for assistance. Do not investigate the nest or attempt to exterminate the bees. If possible, prevent horses from entering the barn if the nest is located near where horses are usually kept. Africanized bees aggressively defend their nest, so move away from the area as quickly as possible. If the bees initiate chase, run away and seek shelter in a house, car, or enclosed area. Absolutely do not stand still and swat at bees, because rapid movement will elicit stinging. Africanized bees will target the face, mouth, ears and eyes, so be sure to protect your head and pull your shirt up over your head if necessary. Do not seek shelter in thick brush or in water, AHBs will wait for you to come up for air and start stinging you. If your horse is being attacked by bees, call 911 or the Fire department, and be sure you seek a safe indoor place.

If you are stung by bees:

- Try to prevent additional stings by running into a safe area such as a house or car
- Cover your head
- Call 911 or the Fire department
- Scrape stingers from skin as soon as possible, or they will continue to release Venom
- Wash stung areas with soap and water and apply ice
- Have a bee sting kit on hand if you are allergic to bees
- Seek medical attention immediately if you notice difficulty breathing, severe swelling, or if stung many times.

It is important to educate ourselves and our families about Africanized honey bees. Domesticated EHBs are a critical component to Florida's agriculture and wildlife. The state is routinely surveying bait hives for AHB populations and working to keep the managed bee keeping industry in Florida healthy. Be aware of honey bees in your environment, and although the majority are EHBs, proceed cautiously and call a professional for colony removal if you notice a feral population of bees. The Florida Department of Agriculture and Consumer Services, the Division of Plant Industry, and the University of Florida IFAS Extension are all helpful additional resources for information on Africanized honey bees.