

What to do about African Honey Bees: A Consumer Guide¹

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Figure 1. African honey bee queens, such as one at the center of the photo, appear nearly identical to European honey bee queens.
Credits: Scott Bauer, USDA/ARS

African honey bees (AHBs) established a presence in Florida in 2001 and since that time have spread throughout the state, hybridizing with European honey bees (EHBs). The hybrid feral bees sometimes are called Africanized honey bees. African honey bees exhibit several characteristics that have caused public concern—the ability to nest almost anywhere, a highly defensive response to colony disruption, and an ability to pursue over long distances individuals who have disrupted a colony. It is important that citizens stay current on AHB information, educate their children about

the AHB, and ensure that their properties are bee-proofed. For more detailed background information on AHBs, please refer to the document “African Honey Bee: What You Need to Know” <http://edis.ifas.ufl.edu/mg113>.

About the African Honey Bee

The media have sensationalized stories and reports of AHBs — labeling them “killer bees.” As a result, an unnecessary public fear of and concern over honey bees has arisen in the United States. However, honey bees are one of the most beneficial pollinators in the world; they ensure the production of about one third of the food we eat, and they are responsible for all the honey and honey-related products we enjoy. The AHB is not very different from the EHB—the docile bee that is managed by American beekeepers. In fact, the AHB is slightly smaller than the EHB. Its sting is no more potent than the EHB’s sting, and the AHB also produces honey and pollinates flowers. The AHB characteristic that concerns the public most is its defensiveness. All honey bees are defensive, which means that if their colonies are disturbed, bees will come out of their hives to defend against the possible intruder. European honey bees may send out 5–10 bees in response to a disturbance that occurs as far as 20 feet from the colony, but if an AHB colony is disturbed, it may send out several hundred bees in response

1. This document is ENY-141, one of a series of the Entomology and Nematology Department, UF/IFAS Extension. Original publication date September 2007. Revised October 2014. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
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to a disturbance that occurs as far as 40 yards from the colony. In addition, AHBs may pursue the possible intruder for up to 400 yards. Also, while most honey bees nest in enclosed areas, AHBs have been known to build colonies out in the open and in close proximity to humans.

What Can I Do?

The general public can take several steps to avoid encountering honey bee swarms or colonies. The first and most important step is for citizens to educate themselves and their families about the AHB. University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) personnel have partnered with the Florida Department of Agriculture and Consumer Services (FDACS) to create the AFBEE program (African honey Bee Extension and Education). Members of the AFBEE program have produced a proliferation of resources about the African bee in Florida that is available on the AFBEE website, www.AFBEE.com.

Terms

- **Swarm:** When a honey bee colony grows in number, it will split, and about 60 percent of the bees will leave in search of another suitable site. This process is called *swarming*. Most people use the term “swarming” to refer to dangerous bee activity or just bees flying around; however, this is an incorrect use of the term. A swarm is a condensed body of bees concentrated in a specific area or moving from its previous colony to a holding area until they find a new home. Bees in swarms are generally docile and not defensive because they have not yet established a colony to defend.
- **Feral Colony:** Nests of honey bees in the wild can be found in many different locations. Bees nest in trees, abandoned buildings, soffits, garages, and other protected spots. It is important to distinguish between feral colonies and *managed colonies*, where bees kept (usually in boxes) by beekeepers are not a threat to the public and are helpful pollinators!
- **PCO:** A pest control operator is a professional pest management company. Many of them are certified to handle honey bee removals.
- **Registered Beekeeper:** A person who owns and operates EHB colonies and is registered as a beekeeper under Florida State Statute 5B-.54.0105 with the Florida Department of Agriculture and Consumer Services. Registered beekeepers are permitted to remove honey bee colonies or swarms provided they use no pesticides or devices to do so.

General precautions

- Look for bees entering or leaving an area, indicating a feral colony or swarm.
- Examine areas before using noisy power equipment (lawn mowers, blowers, chain saws, etc.).
- Never disturb a swarm or colony of bees!
- If allergic to bee stings, obtain an emergency sting kit including a prescription epinephrine autoinjector (EpiPen).

If you find a feral colony or swarm

- Do not disturb it—stay away.
- Do not attempt to remove it.
- Do not spray anything on the bees.
- Contact a trained and registered beekeeper or PCO to have the colony removed or eradicated.



Figure 2. Honey bees swarm on a fallen tree. Never disturb a swarm of bees.

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If bees are disturbed or become defensive

- Get away from bees as quickly as possible – *run!*
- Run in a straight line to shelter—don’t attempt to dodge bees with evasive zig-zagging.
- Protect your face and airways as you run away.
- Take shelter in an enclosed area (shed, house, vehicle, etc.).
- Do *not* jump into water or hide in bushes.

- Do not swat at the bees; rapid movements will agitate them further.
- Call 911 if someone is being attacked.
- Perform care for the sting sites of the victim (see below).
- Refer to a trained and registered beekeeper or PCO for removal or eradication.

If someone is stung

- Remove stingers from skin as soon as possible. Stingers will continue to inject venom until they are removed or exhausted. Stingers can be plucked out or scraped out with a fingernail, the dull edge of a knife blade, or the edge of a credit card—the important thing is to remove as many as possible as quickly as possible.
- Wash sting area with soap and water; apply ice to reduce swelling.
- Call 911 and/or seek emergency medical attention immediately if an allergic reaction occurs such as difficulty in breathing or hives over large areas of the body.
- Seek medical attention if you are stung numerous times: after 5–10 stings/pound of body weight, there is risk of toxic envenomation (bee venom overdose).
- Remember that swelling around the stung area is normal and not an indication of systematic allergy.

Other sting information

- A honey bee only stings once, and then it dies.
- It normally takes about 10 stings per pound of body weight for a fatality to occur from venom toxicity.
- Honey bees are attracted to hair and dark colors (e.g. eyes, open mouth, nostrils).
- If disturbed, EHBs may pursue for about half the length of a football field; AHBs can pursue for three times that length.

Bee-Proofing

In addition to being well-informed about AHBs, citizens should take steps to bee-proof their properties. Bee-proofing is the practice of methodically removing or restricting access to potential honey bee nesting sites. This practice is beneficial for many reasons. Naturally, if an area is bee-proof, the potential for feral colonies to move into that area is greatly lowered; therefore, the risk of stinging incidents is also lowered. In addition, colonies that establish themselves inside a wall or around a structure can cause significant property damage and require removal. This process can be expensive and often requires additional structural repair (which also costs time and money). Bee-proofing

a property not only makes the area safer, but it also saves time and money. It is an ongoing process that requires an initial assessment to address a majority of the sites on a property; also, it requires follow-up inspections to maintain the bee-proofed area. Members of the AFBEE program have prepared detailed information about bee-proofing, but this quick guide can be used as a starter:

1. Locate potential nesting sites: sites that are potentially attractive to honey bee colonies consist of a small opening that accesses an open, shaded area. Examples are eaves under roofs, water meters, manholes, electrical boxes, holes in a structure that lead to open space inside a wall, gutter down-spouts, etc.
2. Prevent bees from nesting in these sites by limiting access to them or removing the site completely. Use screen, caulking, expanding foam, or wood/concrete filler to close off holes in a structure that are 1/8 inch or greater.
3. Regularly inspect property to check for bee activity and to maintain previously bee-proofed sites.
4. Read the AFBEE document “Bee-proofing for Florida Citizens,” <http://edis.ifas.ufl.edu/in741>.

Further Information

For further information, contact your local UF/IFAS Extension office, visit the AFBEE Program website at www.AFBEE.com and <http://solutionsforyourlife.ufl.edu> (search honey bees).