

What to do about African Honey Bees: A Consumer Guide¹

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In 2002, African honey bees (AHB) established a presence in Florida. The AHBs exhibit several characteristics that have caused public concern—the ability to nest 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.

About the AHB

In recent years, the media has made a spectacle of the African honey bee—labeling it the killer bee. As a result, an unnecessary public fear of and concern over honey bees has arisen in the southern United States. However, honey bees are one of the most beneficial pollinators in the world, for they ensure the production of about one third of the food we eat; also, they are responsible for all the honey and honey-related products we enjoy. The African (sometimes called Africanized) honey bee is not very different from the European honey bee—the docile bee that is managed by American beekeepers. In fact, the AHB is slightly smaller; its sting is not any more potent, and it also produces honey and pollinates flowers. The AHB characteristic that concerns the public most is its 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 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 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 in close proximity to humans.

What Can I Do?

The general public can take several steps to avoid the risk of negative honey bee interaction. The first and most important step is for citizens to educate themselves and their families about the AHB. Recently, UF-IFAS personnel have partnered with the Florida Department of Agriculture and Consumer Services to create the AFBEE program (Africanized honey Bee Extension and Education). To date, members of the AFBEE program have produced a proliferation of resources about the African bee in Florida. Much information is available about the AHB via this program, and citizens are encouraged to visit the AFBEE website for detailed and up-to-date articles: <http://entnemdept.ifas.ufl.edu/afbee/>.

Terms:

- **Swarm:** When a honey bee colony grows in number, it will split and about 60% of the bees will leave in search of another suitable site. This process is called *swarming*. Most people use the term “swarming” to refer

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to dangerous bee activity or just bees flying around; however, this is a misnomer. A swarm is a condensed body of bees concentrated in a specific area or moving from its previous colony to that holding area until they find a new home. Bees in swarms are generally docile and not defensive as they have not yet established a colony to defend.

- **Feral Colony:** a nest of bees in the wild, pose a threat to the public and should be removed; important to distinguish from *managed colonies*, bees kept (usually in white boxes) by beekeepers, not a threat to the public, and are helpful pollinators!•
- **PCO:** Pest Control Operators, professional pest management companies; many are certified to handle honey bee removals

General precautions:

- Look for bees entering or leaving an area, indicating a feral colony or swarm.
- Examine area prior to 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.

If a feral colony or swarm is found:

- Do not disturb it—stay away
- Contact a PCO to eradicate the bees
- Do not attempt to remove it
- Do not spray anything on the bees

If bees become defensive:

- Get away from the bees as quickly as possible.
- Cover face and eyes
- Take shelter in enclosed area indoors
- Do not hide in the bushes or jump in the water
- Do not stand still
- Do not swat the bees—rapid movements will cause bees to sting

- Contact a PCO or emergency personnel

If someone is stung:

- Scrape (do not pluck) stinger out in a sideways motion with a fingernail or the edge of a credit card (or other blunt object) as soon as possible—this will stop the release of venom
- Wash sting area with soap and water; apply ice to reduce swelling
- If allergic reaction occurs (difficulty breathing, hives widespread over body, dizziness), immediately contact emergency personnel and employ emergency sting kit (if available)
- 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, then it dies
- For a fatality to occur from venom toxicity, it normally would take about 10 stings per pound of body weight
- Honey bees are attracted to hair and dark colors (e.g. eyes, open mouth, nostrils)
- If disturbed, European honey bees may pursue for about half the length of a football field; AHBs can pursue three times that length

Bee Proofing

In addition to being well-informed about Africanized honey bees, citizens should take steps to bee-proof their properties. Bee-proofing is the practice of methodically removing or restricting access to potential AHB 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 must be removed immediately. This process can be expensive and often requires 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.

Further Information

For further information, contact your county extension office, or visit <http://entnemdept.ifas.ufl.edu/afbee/> and <http://solutionsforyourlife.ufl.edu> (search honey bees).