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ENY-146

UF UNIVERSITY of FLORIDA
IFAS Extension

Living with African Bees in Florida's Outdoor Workplaces[1]

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Introduction

This document offers African honey bee related recommendations and precautions specific to outdoor workers in Florida. The outdoor worker category includes utilities employees, park employees, right-of-way workers, landscape workers, construction workers, and any one else who works outdoors. Outdoor workers should be aware of the presence of African honey bees (AHB) in Florida, and this awareness should encourage healthy respect and caution of all stinging insects and a realization of the importance of honey bees nationwide. In addition to being aware of the African bee's presence, it may be helpful for outdoor workers to know some basic biological and behavioral characteristics of this honey bee; this prior knowledge is presupposed for the recommendations in this document. Many African bee educational resources exist for Floridians and outdoor workers specifically. Please see the *Additional Resources* section at the end of this document for more information.

Where to Look

One characteristic of the African honey bee that may cause concern for outdoor workers is its ability to nest nearly anywhere. Because outdoor and utility workers are outdoors most of the time, they have a greater likelihood of encountering wild or feral colonies of these bees. Figures suggest that in areas where African bees saturate the feral environment, there may be 100-200 colonies per square mile. Perhaps the most important and most useful recommendation for any outdoor worker is to be aware of his or her outdoor surroundings at all times and to inspect any area before entering, especially if the area is not frequented by human traffic. Here are some things to keep in mind as you inspect your surroundings:

- Watch for bees flying fast and straight into and out of any object or area. This behavior is an indication that a colony is nearby.
- AHB will nest in the ground: in burrows, meter boxes, irrigation valve boxes, and electrical boxes. Approach with caution if servicing any of these areas.

1. This document is ENY-146 (IN783), one of a series of the Entomology & Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. First published: June 2008. For more publications related to horticulture/agriculture, please visit the EDIS Website at **http://edis.ifas.ufl.edu/**.
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- AHB will use any protected location or void to house their colony. Any place where you have seen a paper wasp nest could house an AHB colony
- Common nesting locations include
  - Eaves under roofs
  - Water meter boxes
  - Manholes
  - Electrical boxes
  - Gutter down-spouts
  - Abandoned vehicles
  - Abandoned appliances
  - Empty containers
  - Empty flower pots
  - Lumber piles
  - Utility infrastructures—power poles, light poles, etc
  - Old tires
  - Garages
  - Outbuildings
  - Sheds
  - Walls
  - Chimneys
  - Attics
  - Soffits
  - Under portable buildings, mobile homes, sheds and dog houses
  - Bird nest boxes
  - Hollow trees
  - Playground equipment
  - Exposed tree branches
  - Bees visiting flowers are not a threat and do not indicate a nearby colony.

Figure 1. A swarm of bees that has settled on a dumpster. Credits: AllFloridaBeeRemoval.com

Figure 2. A swarm of bees in the branches of a tree. Credits: M. K. O'Malley, University of Florida

What to Expect

African bees are more defensive than European bees, the latter which are the honey bees beekeepers manage; as a result, AHBs can send out several hundred bees in response to a disturbance up to 40 yards away. In addition to being bumped, or

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Figure 3. A honey bee colony established close to the ground between the roots of a tree. Credits: W. H. Kern, Jr., University of Florida

Figure 4. A two month old honey bee colony established in the exposed branches of a tree. Credits: W. H. Kern, Jr., University of Florida

Figure 5. Bees on a palm frond that have started building comb. Credits: W. H. Kern, Jr., University of Florida

physically disturbed, a honey bee colony may become agitated as a result of any loud noise or vibration caused by tractors or heavy machinery. In terms of defensiveness and potential number of stings if disturbed, AHBs are comparable to Florida's native yellow jackets and bald faced hornets.

Figure 6. Honey bee colony inside power box; foam has been used to eradicate the colony. Credits: AllFloridaBeeRemoval.com

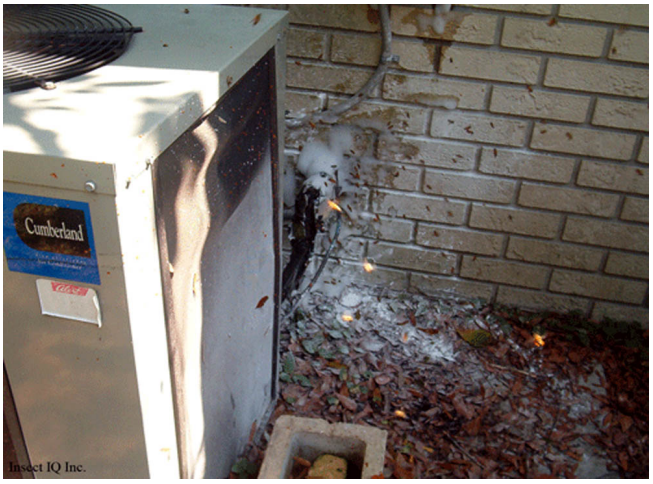

Figure 7. Honey bee colony that has become established in the wall behind an AC unit; foam has been used to eradicate the colony. Credits: AllFloridabeeremoval. com

What to Do If the Colony is Disturbed

If an outdoor worker finds a feral colony, he or she should contact a pest control operator as soon as possible to eradicate the colony (see *Resources* section for *Choosing the Right Pest Control Operator for Honey Bee Removal: A Consumer Guide,* Edis). If a honey bee colony is disturbed, the first thing one should do is ***RUN***. The reason honey bees exhibit defensive behavior is to protect the resources (honey, brood, pollen, etc.) of the colony, so if the victim quickly leaves the area, he or she will no longer be a threat to that colony. African bees have been known to pursue a possible intruder for up to 300 yards. A stinging victim should attempt to ***enter a building,***

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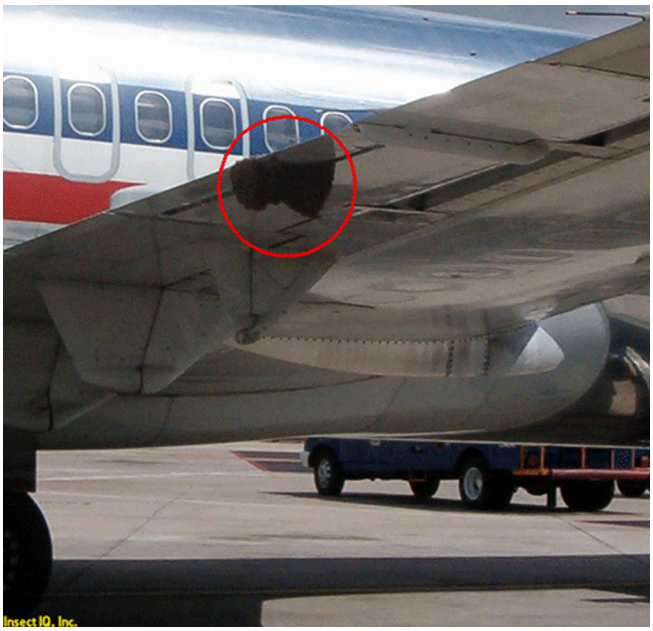

Figure 8. A swarm of honey bees that has settled on the underside of an aircraft wing. Credits: Insect IQ

Figure 9. A honey bee colony that has been removed from a water meter box. Credits: Insect IQ

vehicle or other enclosed structure. Even though this may result in some bees flying into the enclosure along with the victim, it is preferable to sustain a small amount of stings from the 12-20 bees that followed inside, rather than to be outside with the several hundred agitated bees. ***It is not recommended that a stinging victim jump into water or attempt to hide in bushes***. The bees may remain agitated for a long period of time and will wait above the surface of the water for an intruder to surface.

Because outdoor workers have such an increased likelihood of encountering African bees in the workplace environment, it may be wise for these workers to carry some form of portable personal protective equipment such as a veil or sting suit. Several products exist that can both offer immediate, emergency protection from stinging attacks and can fold-up into a small portable size.

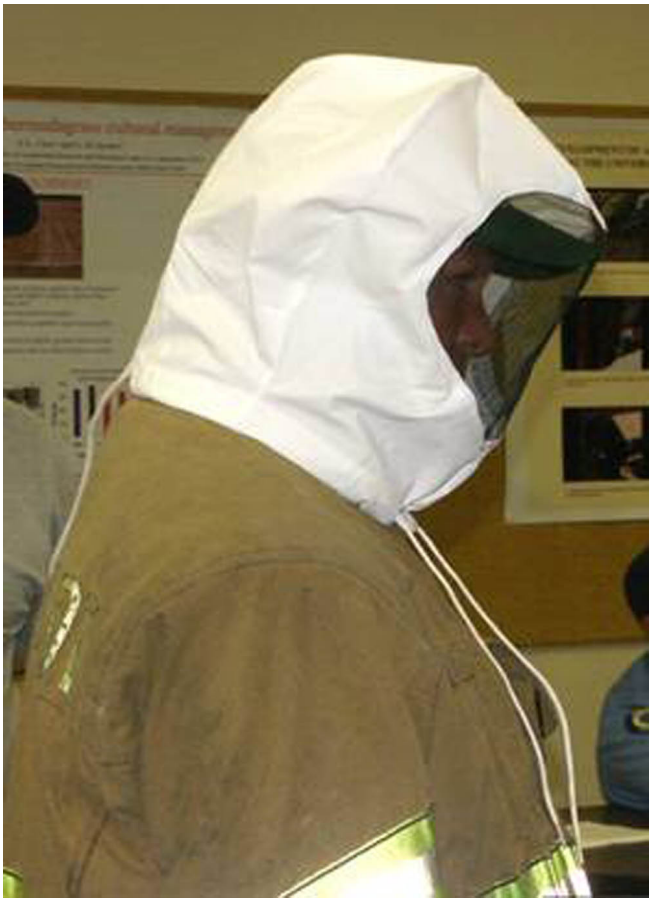

Figure 10. First responder wearing a convenient, lightweight, and portable veil that can be folded to be about the size of a wallet. Credits: W. H. Kern, Jr., University of Florida

If Stinging Occurs

Generally, honey bee stings result in localized swelling and some skin inflammation. When a honey bee stings, it leaves behind a stinger attached to a venom sac. One should not try to pull it out, as this may release more venom. The stinger and venom sac should be gently scraped out of the skin with a blunt-edged object, such as a fingernail, credit card, or the back of a key. The area should then be washed with soap and water. A cold or ice pack, wrapped in cloth may be held on the sting area for a few minutes. Sting swabs in first aid kits usually contain ammonia or lidocaine. Acetaminophen may be taken for pain.

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For those who are allergic to honey bee venom, a single sting may be fatal. If a sting occurs, the victim should watch for signs severe allergic reaction:

- Large areas of swelling (i.e. an entire leg)
- Abnormal breathing or wheezing
- Tightness in throat or chest
- Dizziness
- Hives
- Fainting
- Nausea or vomiting
- Persistent pain or swelling (e.g. persists for more than two weeks)

If any of these symptoms occur, the victim must immediately seek emergency medical attention or call 911.

Additional Resources

Choosing the Right Pest Control Operator for Honey Bee Removal: A Consumer Guide, University of Florida, IFAS Extension publication that offers recommendations to any Floridian in need of contracting a PCO.

Bee Proofing for Florida Citizens, EDIS

http://edis.ifas.ufl.edu/IN741

University of Florida, IFAS Extension publication that instructs homeowners and property owners in the specifics of bee proofing and its importance.

Frequently Asked Questions about the African Honey Bee in Florida, EDIS

http://edis.ifas.ufl.edu/IN738

University of Florida/IFAS Extension EDIS document that addresses questions frequently asked about the African bee in Florida.

What to do About African Honey Bees: A Consumer Guide, EDIS

http://edis.ifas.ufl.edu/IN739

University of Florida/IFAS Extension EDIS document that offers recommendations and precautions to Florida's general public about the African honey bee.

AFBEE Program

http://entnemdept.ifas.ufl.edu/afbee/

The African honey bee Extension and Education Program was established by the Florida Department of Agriculture and Consumer Services and the University of Florida, and it serves to educate all Floridians about the presence of African bees in Florida. The AFBEE Program website is a clearing house of information on African bees. In the resources section, customers can find fact sheets, presentations, videos, and educational documents catered specifically for their needs. The downloadable list of trained PCOs is available under the *Bee Removal* tab.

Florida Department of Agriculture and Consumer Services', Division of Plant Industry, Bureau of Plant and Apiary Inspection, African Honey Bee Page
http://www.doacs.state.fl.us/pi/plantinsp/ahb.html

This website includes links to videos, fact sheets, press releases, and more. It also includes a list of trained PCOs.