

	OSCEOLA COUNTY EMERGENCY SERVICES.	
	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 1 of 10

I. Title

Africanized Honey Bee (AHB) Response

II. Reference

Florida Department of Agriculture, Division of Plant Industries; University of Florida; United States Department of Agriculture, Agricultural Research Center; CFAI 2C

III. Guiding Principle

The Osceola County Emergency Services Department will respond to suspected attacks of Africanized honey bees using appropriate safety precautions to mitigate the danger of further attack to humans or livestock and render care and other services as may be warranted.

IV. Definitions

Africanized Honey Bee (AHB)

Invading species of bee that was originally imported to South America from Africa and now has invaded Florida and several other southern and western states. Africanized Honey Bees are extremely defensive of hives and can kill a human and livestock if sufficient numbers attack. (Attachment 1)

Comb

The food and egg storage of the hive made of beeswax. AHB build a comb in the hive very rapidly; however, the majority of the comb is for brood (offspring) development. Only a very small portion of the comb is for honey production.

Hive

AHB will form a hive in any location that provides a defensible location from environmental threats and predators. Once the hive has been established they will become very defensive and aggressive to any perceived threat to the colony.

	OSCEOLA COUNTY EMERGENCY SERVICES.	
	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 2 of 10

Normal population of a hive is approximately 50,000 bees. Potential hive locations can be trees, abandoned structures or vehicles or any outdoor location such as burrows, old nests, downed trees, and stumps.

Swarm

When colonies of bees become too large for the hive, the old queen and some worker bees leave the colony to form a new colony in another location. AHB may swarm up to 16 times in a season. AHB may swarm to several locations before making a hive. During this time AHB are less aggressive.

V. Procedure

A. Communications

During the dispatch process the responding unit should gather as much information as possible about the scene including the anticipated number of victims, possible location of hive or bee activity, and the location of any schools/daycare facilities or public gathering areas that might draw attacks.

B. Staging and Size Up

1. All responding units will stage a minimum of 400 yards away from the scene. All emergency lights will be turned off, radio volumes, and other noise producing devices will be turned down. Noise should be kept to a minimum.
2. Evaluation of the scene will be done prior to any rescue or attack. It should be determined to the extent possible if the bees are attacking, if persons or livestock are in danger, and if there is comb present.

C. Defensive Operations

1. Observe the scene and advise Communications to contact listed local beekeepers.

	OSCEOLA COUNTY EMERGENCY SERVICES.	
	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 3 of 10

2. Control access to the scene and deny entry to anyone not having an emergent need for access.

D. Offensive Operations/Staging

1. Personnel will don PPE prior to leaving the staging area. PPE for this type response consists of turnout coat and pants, boots, hood, eye protection, bee hood, and structural gloves.
2. The coat and cuff of bunker pants will be secured with a belt or duct tape to prevent bees from entering under the coat or pants.
3. Helmets will not be worn to prevent bees from hiding under the helmet and transported to staging, medical or rehab sections.
4. The medical sector will be established at least 300 yards away from scene.
5. Medical units' emergency lights will be turned off. Doors and windows are to remain closed at all times.
6. Medical treatment will be administered according to established protocols.
7. Preset 1 ¾ inch attack line using 3-5% Class A foam.

E. Offensive Operations/Response

1. The engine will proceed to within 150 feet of the scene and deploy a 1¾-inch attack line with foam ready.
2. Once attack line is in place foam will be added at 3-5% at 100 p.s.i. and the nozzle set to a wide fog pattern. Foam will be discharged into the air in the area over the victims and the hive.

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	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 4 of 10

3. When the bees have been subdued, concentration should be on foaming victims completely to kill any bees not covered by the earlier application of foam. Brush all bees off victims before moving patients to the medical sector.
4. Engine noise and vibration may cause the AHB to attack apparatus as well.
5. To prevent recurring attacks the hive must be destroyed and all AHB in the area must be terminated. AHB will hide once the foam is started, so foam applications should be very thorough to ensure hidden bees are eliminated as well.
6. Responding personnel must be also be foamed down to ensure that all bees are eliminated prior to return to staging.
7. Upon conclusion of the operation a sample of bees (minimum 100 bees) must be collected and forwarded to the Department of Agriculture to verify AHB or European honey-bee (EHB) species. Bees will be packed in a one-half pint plastic container with a screw-type lid, with 70 percent isopropyl alcohol added to the container to completely cover the bees. Bee samples are to be shipped to:

State of Florida
 Department of Agriculture and Consumer Services
 1911 S.W. 34th St.
 Gainesville FL 32614-7100
 Attn: David Barnes
 Bureau of Plant and Apiary Inspection



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#203.03

Section: Operations

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DRAFT

Revision:

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Frank R. Montes de Oca, Jr., Director/Fire Chief

Signature:

Group Name: Tech/Rescue

Page: 5 of 10

F. Demobilization

All vehicles and apparatus will be checked to ensure no bees have taken refuge in, on, or under the units. All personnel and equipment will be checked to ensure that bees have not taken refuge in or on equipment before returning to service.

	OSCEOLA COUNTY EMERGENCY SERVICES.	
	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		#203.03 Revision: Signature: Page: 6 of 10

Attachment 1

Africanized Honey Bees



European style
honeybee
5/8 "



Africanized
honeybee
5/8 "

About Africanized Honey Bees

The Africanized Honey Bee, popularly known as the "killer bee," is moving into South Texas and the southern United States. Scientists are not certain how far north the bee will spread, but they do know that it will cause problems wherever it resides in large numbers.

This insect, which has been migrating from South America since the 1950's, looks just like a domestic honeybee, but it is not nearly as good natured. In fact, it has a bit of a quick temper. The domestic bee has lived in harmony with human beings for hundreds of years. It has been bred for gentleness and good honey production.

By contrast, the Africanized bee is a "wild" bee that is not comfortable being around people or animals. Any colony of bees will defend its hive, but Africanized bees do so with gusto. These bees are more likely to sense a threat at greater distances, become more upset with less reason, and sting in much greater numbers.

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	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 7 of 10

More People Will Get Stung

Bees probably will sting more people wherever Africanized honeybees become established. Some individuals may get stung hundreds of times in only a few moments.

The Africanized bee's "killer" reputation is greatly exaggerated, but it does have some basis in fact. In isolated instances, people and animals have been stung to death. Most often, the person who died was not able to get away from the bees quickly. Animal losses have occurred for the same reasons. Pets and livestock were tied up or penned when they encountered the bees.

However, Africanized bees do not roam in giant swarms looking for victims to attack. Like most animals, these bees react defensively only when they feel threatened.

The Africanized bee is a new insect nuisance, but it will not change the way people live and work and play. People in parts of Central and South America have lived with this bee for several decades without great difficulty. Also, people have lived with them in Texas since 1990.

Know the Bee's Behavior

Your best protection against the Africanized bee is to understand how it behaves and react accordingly.

Bees "swarm" to establish new hives in the spring and fall. Bees are most active then. You may find bees setting up housekeeping where you live literally overnight. Individual bees gathering pollen on flowers or masses of bees clinging together in swarms generally will not bother you. However, bees are more likely to be defensive after they have established a colony and started raising young.

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	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 8 of 10

Safety

Take Some Common Sense Precautions at Home

- Make a "bee patrol" around your home once or twice a week during swarming season usually in the spring and fall. Listen for the sound of bees in the air. Persistent buzzing may mean a hive or swarm is nearby.
- "Bee-proof" your home by filling in potential nesting sites such as tree cavities and holes in outside walls. Put screens on the tops of rainspouts and over water meter boxes in the ground. Remove piles of trash and junk.
- If you discover a bee colony, don't disturb it. Find out who removes or destroys wild colonies in your area and report it to them. Try calling a pest control operator to see who removes bees.
- If attacked by Africanized honeybees, your best defense is to run away as fast as you can.
- If you are stung many times, seek medical attention immediately.
- If you are allergic to bee stings, or think you might be, consult your physician immediately for the best precautions to take.

Mowing or Operating Other Machinery

Vibration and exhaust from mowers and other equipment can disturb the beehive, and bees will respond by attacking.

- Check the area carefully for bees and hives before starting motorized mowers, weed choppers or chainsaws.
- Be aware of culverts or drainage pipes that may be harboring a colony, and junk piles of dense shrubbery that may be shielding a hive from sight.
- Don't allow grass clippings to be propelled into suspect areas.
- Have an emergency plan. Know where you will run for cover if attacked.

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	STANDARD OPERATING GUIDELINES	
	Section: Operations	Effective: DRAFT
	Authority: Frank R. Montes de Oca, Jr., Director/Fire Chief	
Group Name: Tech/Rescue		Page: 9 of 10

While At Play

- Watch and listen for bees.
- Avoid beehives and bee traps hanging in trees.
- Bees nest in hidden places. Don't play near old buildings or junk piles.
- If you notice numbers of bees flying around your home, contact authorities.
- If bees start flying around you, run away. Don't swat them--it will only make more bees want to sting you. And don't "freeze" in place--you will still get stung if you do.
- If bees attack, don't try to escape by jumping into a swimming pool or pond. The bees likely will be waiting for you when you come up for air.

Protect Confined Animals

- Check carefully for bees in pens or barns where animals are confined. Regularly check areas where pets are kept on leashes or in small fenced yards or pens.
- Call authorities to remove nests or swarms.
- If bees are disturbed and begin stinging, open gates and cover animals. Move animals to safe distance.
- Animals stung repeatedly should be seen by a veterinarian. First aid is the same as for humans.
- Watch for allergic reaction, such as pinpoint pupils, shaking and vomiting.

Know the Facts

Africanized and domestic honeybees look the same, so stay away from all bees.

- Africanized bees will build a nest almost anywhere.
- If you know of any wild bee nests, have the nest removed.
- Africanized bees defend a wide area around their home, so you may not even see the hive before bees start buzzing around you.



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Group Name: Tech/Rescue

Page: 10 of 10

- Large numbers of Africanized bees are likely to sting when they sense someone is too near their nest.
- If you get stung or hear bees buzzing, run away fast and get inside a house or car. If there is no shelter, run through bushes or high weeds.
- A honeybee will leave its stinger in your skin if it stings you. Get the stinger out by raking your fingernail across it. Don't pinch or pull the stinger out. Put ice on a sting to reduce the swelling.