

Bees

## **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.

### **More People Will Get Stung**

More people probably will be stung by bees wherever Africanized honey bees 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.

# Honey Bee Swarms and their Control

**IN THIS F@STSHEET**

USING SOAPY WATER TO CONTROL BEES  
FOR MORE INFORMATION



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Honey bees are fascinating social insects with a complex set of behaviors. One of the most interesting honey bee colony behaviors is known as "swarming." Swarming is the method used by honey bees to start a new colony.

A swarm is merely a honey bee colony in search of a nesting site. A swarm generally consists of a mated queen bee along with hundreds or thousands of accompanying worker bees. Swarming bees are not normally aggressive and can, in most cases, be approached safely. Unless you are an experienced beekeeper, however, it is best to avoid getting too close to swarming bees. Bees in swarms may, on occasion, sting intruders who venture too close.

Although bee swarms generally pose little threat to people, and provide a unique chance to observe honey bee behavior, they can cause problems. When swarms come too close to areas of human activity, or frighten people with a fear of bees, they may need to be controlled. Also, in areas where Africanized honey bees are established, it may become necessary to control wild bee swarms.

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## **USING SOAPY WATER TO CONTROL BEES**

Soapy water is a safe and effective way to control undesired honey bee swarms. Soapy water applied in this manner is an effective tactic in "drowning" honey bees only if they are clustered in an exposed swarm. It is less effective and is not recommended for controlling undesired, established colonies in areas like hollow trees, wall voids, or underground nests. Neither would it be recommended for killing managed colonies where bees are "on the comb".

Mix 3/4-1 cup of ordinary liquid dishwashing detergents in 1 gallon of water. Add the mixture to a regular hand-held, pump-up type garden sprayer. Wet the surface of the swarm with the soapy water and continue wetting as the outer layer of soaked bees fall from the swarm. Continue wetting the newly, exposed, dry bees until all have been thoroughly covered and drowned. You may want to place a garbage can or similar receptacle beneath the swarm to catch the soaked bees as they fall from the swarm (enhances "drowning" and simplifies removal). You may need to use the sprayer wand to hasten the "release" of "wetted" bees from the swarm surface and the exposure of the remaining, dry bees in the center of the swarm.

Dawn™ liquid dishwashing detergent has been most extensively evaluated; however, other dishwashing detergents should be just as effective. Commercial insecticidal soaps

do not seem to work as effectively as ordinary dishwashing detergents. Powdered (dry) dishwashing and laundry detergents have been used by APHIS/USDA in Mexico and South Texas with equally satisfactory results, however they have not been tested as thoroughly as the liquid detergents. Dry formulations are mixed at 3/4-1 cup per gallon of water, also. Warm water, though not necessary, helps the soap disperse quicker.

Soapy water has been approved for use to control Africanized honey bees (AHB) by the Environmental Protection agency provided that: 1) the detergent used for AHB cannot be sold as a pesticide; and 2) the treatment mixture of detergent and water cannot be used on edible food and feed commodities.

Bee swarms should not be killed indiscriminately. Bees are beneficial insects, helping pollinate flowers and vegetables. Unless a swarm is causing a distinct problem and cannot be tolerated, it should be left alone. Most honey bee swarms will leave a resting site within a few hours. Eliminating possible points of entry by bees into buildings and removing other potential nest sites is the best way to prevent serious problems with bees around structures.

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**Authors:**

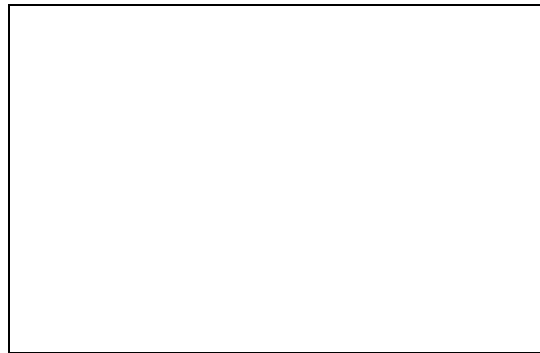
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**Publication information:**

This publication is part of the House & Landscape Pest Series produced by the Department of Entomology, Texas A&M University, College Station, TX 77843-2475. The most recent update can be found at: *Series Editor:* M. Merchant. For more information about arthropods, check out the Texas A&M Entomology Website at <http://insects.tamu.edu>

## Bumble Bees

**IN THIS F@STSHEET**  
BIOLOGY  
CONTROL  
FOR MORE INFORMATION



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Bumble bees are one of several types of bees that live in and around Texas homes. Bumble bees and their relatives, the carpenter bees, are relatively large (15-25mm-long), robust bees covered with numerous hairs. They often have black bodies covered with black and yellow hairs that create a banded pattern. Approximately 50 species of bumble

bees live in North America, most of which are important pollinators of flowers and considered beneficial.

Carpenter bees are similar in appearance to bumble bees, but lack hairs on the top surface of the abdomen. These bees sometimes destroy or damage wooden decks, patios and other structures due to their habit of boring nest holes in soft wood [see Extension factsheet L-1826 for more information about carpenter bees and their control].

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## **BIOLOGY**

Bumble bees are social insects. Nests are usually constructed underground, and consist of a series of more-or-less spherical, waxen cells some of which hold the eggs and young. Some of the cells also serve as storage receptacles for honey and pollen. Nesting sites may be depressions in the ground, deserted mouse nests, hollow logs, cavities in rotten stumps, railroad tie retaining walls, or even piles of grass, weeds or rubbish. Bumblebee colonies are smaller than those of honey bees or yellowjackets, and usually consist of only a few hundred individuals. Colony sizes increase throughout the summer. With the advent of cool weather most bees die, with only one or a few queens surviving the winter in sheltered locations.

Bumble bees can become pests when their nest is located near places frequented by people. Despite their generally docile nature, the activities of bumble bees can be alarming to some. Though not as likely to attack people as other social insects like yellowjackets, bumble bees can and will sting. Unlike honey bees, which have a barbed stinger that remains in the skin, bumble bees can sting repeatedly. Stings are most likely to occur around a nest. Bumble bees rarely sting during pollen gathering visits to flowers.

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## **CONTROL**

Insecticide sprays should never be applied to flowers for bumble bee control, as this is ineffective and can harm other beneficial insects. The most effective control is to locate and treat the nest. A small amount of insecticide dust, such as Sevin® or other appropriately labeled product, should be applied to the mouth of the nest. Treatments are most effective if blown into the nest using a dusting machine or bellows-type applicator. Aerosol or liquid insecticide sprays labeled for bee and wasp control can also be used, especially when nests have been dug up or exposed. Persons with allergies to bees or wasps should avoid attempting to treat bee nests, as there is always a chance of getting stung during treatment. Another option is to contact a professional pest management company for nest extermination.

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The most recent update can be found at: <http://dallas.tamu.edu/insects/Ent-1010.html> .

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*Last revised: 9/6/01*