

What to Do If Attacked By Africanized Honey Bees

where bees have been found – [map](#)

IMPORTANT NOTE: African Honey Bees are attracted to CO₂, which is expelled naturally while breathing. AHBs will aim for the mouth and nose first. Often people and animals die of asphyxiation when the nose or throat swells shut from the stings. More deaths occur from suffocation rather than from the venom itself. —Jerry Hays, apiary inspection chief, Florida Dept. of Agriculture

Remember these important steps:

1. RUN away quickly. Do not stop to help others. However, small children and the disabled may need some assistance.

Photo: Closeup of Africanized honey bees (AHBs) surrounding a European queen honey bee (EHB), marked with a pink dot for identification. Since AHBs arrived in Texas in 1990, they've mated with EHBs and spread throughout the Southwest. But rather than commingling, AHBs tend to replace



EHBs, partly because EHB queen bees mate disproportionately with African drones. (by Scott Bauer)

2. As you are running, pull your shirt up over your head to protect your face, but make sure it does not slow your progress. This will help keep the bees from targeting the sensitive areas around your head and eyes. (They are attracted to the CO₂ expelled from your nose and mouth during normal breathing and will target those areas first.)

3. Continue to RUN. Do not stop running until you reach shelter, such as a vehicle or building. A few bees may follow you indoors. However, if you run to a well-lit area, the bees will tend to become confused and fly to windows. Do not jump into water! The bees will wait for you to come up for air. If you are trapped for some reason, cover up with blankets, sleeping bags, clothes, or whatever else is immediately available.

4. Do not swat at the bees or flail your arms. Bees are attracted to movement and crushed bees emit a smell that will attract more bees.

5. Once you have reached shelter or have outrun the bees, remove all stingers. When a honey bee stings, it leaves its stinger in the skin. This kills the honey bee so it can't sting again, but it also means that venom continues to enter into the wound for a short time.

6. Do not pull stingers out with tweezers or your fingers. This will only squeeze more venom into the wound. Instead, scrape the stinger out sideways using your fingernail, the edge of a credit card, a dull knife blade or other straight-edged object.

7. If you see someone being attacked by bees, encourage them to run away or seek shelter. Do not attempt to rescue them yourself. Call 911 to report a serious stinging attack. The emergency response personnel in your area have probably been trained to handle bee attacks.

8. If you have been stung more than 15 times, or are feeling ill, or if you have any reason to believe you may be allergic to bee stings, seek medical attention immediately. The average person can safely tolerate 10 stings per pound of body weight. This means that although 500 stings can kill a child, the average adult could withstand more than 1100 stings.

Some of the places they have been known to nest include:

- Trees and Shrubs
- Wood Piles or Trash Piles
- Flower Pots
- Old Tires
- Ground Holes
- Chimneys
- Storage Sheds
- Wall Cavities
- Attics and Crawl Spaces
- Roof Overlaps and Building Eaves
- Underground Utilities
- Water Meters and Sprinkler Control Boxes
- Old Mine Shafts or Rock Crevices
- Evaporative Coolers

What Should I Know About AHBs?

Africanized Honey Bees are much more prone to attack in defense of their colony than European Honey Bees. Vibration, noise, or motion within 50 feet of the nest can provoke an attack. They dislike the sounds that are made by such tools as lawn mowers, leaf blowers, or hedge trimmers. Odors can also aggravate them, including freshly-cut grass or citrus.

Africanized Honey Bees will pursue people or animals as far as $\frac{1}{4}$ mile, and will remain agitated for up to eight hours after they are disturbed.

Since the discovery of African bee in Mesquite, Nevada in November of 1999, the UDAF has been working with Washington County public safety agencies regarding African bee response. We will redouble our efforts to offer training to the health department, police and fire, school districts and any group that seek assistance.

Our agency's Internet web site has useful information on how to be safe when it come to the African bee.

We continue to work with Utah beekeepers to identify hives that become aggressive. We wish to remind residents that the honey bee population in Utah is very important to agriculture and wildlife, and that not all bees are African bees.

The bee is aggressive, only when defending its hive. It does not initiate

random attacks, instead, it perceives humans or animals as threats to its hive and acts to defend it.

The best way to avoid an attack is to be aware of where bees tend to form hives, look for bees and if you see bees, move in the opposite direction.

More details on how to identify the African bee and what to do if you encounter them is available [here](#).

If Your Pet or Livestock is Being Attacked

Try to get the animal away from the bees without putting yourself in danger.

A solution of $\frac{1}{2}$ cup soap per gallon of water will kill any bees that are clinging to the animal, if you are able to safely approach.

Be aware that, when agitated, bees will attack anything that resembles their natural enemies - bears and skunks.

This includes anything dark-colored or furry, which puts pets and livestock at particular risk.

Where did Africanized Honey Bees come from?

They were introduced into Brazil in 1956, and have slowly spread northward since then. They have been in the United States since 1990, when they were detected in Hidalgo, Texas. They are now found in parts of California, Arizona, Nevada, New Mexico and Texas, and as close to Utah as Mesquite, Nevada.

How to Subdue Attacking Bees - a Guide for Fire Fighters and Rescue Personnel

Africanized honey bees (AHB) are spreading in Texas. Their attacks can be a life-threatening emergency. Fortunately, rescue personnel can help people under attack by using (with slight modification) equipment and materials common on fire trucks, ambulances and hazardous materials response vehicles.

This guide can also be used to protect people from swarms of wasps and domestic honey bees, which to the naked eye are indistinguishable from the AHB.

PROTECTIVE CLOTHING

Conventional heavy turnout gear worn by most fire fighters protects all areas of the body except the head and neck. Consequently, veils are essential, but they must be adapted to the headgear worn. Bee veils are available from beekeeping supply houses. Mosquito veils can be obtained from military surplus and sporting goods stores. Seal the veil at top and bottom with string or duct tape. Tape should also be used around the waist, wrists and ankles, and to close any other gaps. Leather areas of turnout gear, such as gloves, may antagonize the bees. Plastic or rubber gloves are best.

Disposable hazardous materials suits, such as those made of Chemrel R, Saranex R or Tyvek R, provide good protection, especially if worn over street clothing or uniforms.

Reflective aluminum suits work but may limit movement, and veils and duct tape are needed.

WETTING AGENTS

Bees are easily immobilized and killed by wetting agents (surfactants) - including commercial liquid dishwashing detergent. Nonfoaming fire control chemicals and fire fighting foams with surfactant characteristics such as the aqueous film-foams (AFFF) also work.

Not all commercially available products have been tested, but most such wetting agents should be equally effective. Chemicals tested so far include: original Palmolive dishwashing liquid, 9-55 R fire control chemical, Silv-ex R foam concentrate and FC-600 Light Water brand ATC/AFFF. All had a light but distinctive odor. A one percent solution was sufficient to immediately immobilize honey bees and apparently kill them within 60 seconds.

If there is doubt whether a particular chemical will work, rescue personnel should enlist the aid of a local beekeeper. Clearly, human and animal safety must be the most important consideration. The U.S. Environmental Protection Agency has conditionally approved detergents for use against AHB's.

VICTIM RESCUE

After arriving at a site, rescue personnel first should assess the situation from within their vehicles. Then they should retreat several hundred yards, put on protective clothing and move any onlookers to a safe distance.

Each situation is unique, but to rescue a victim, two things must be done as quickly as possible: establish an adequate insect barrier, and neutralize the insects' alarm odor – which consists of chemical components of venom that enable more bees to find and attack the victim.

Fire and rescue units responding with standard fire fighting equipment can quickly accomplish both objectives by using water plus a non-toxic wetting agent.

Using standard fire fighting procedures, set up a line with an educator capable of delivering a one to three percent spray of one of the foaming/wetting agents and a nozzle capable of delivering a wide fan pattern. A light initial application to the victim will stop the attack by most of the insects on or near the victim within 60 seconds. These insects, unable to fly, will begin to suffocate and can be quickly brushed aside.

If an obvious line of insect flight can be determined, a vertical wall of spray 20 to 30 feet in the air should intercept further flight activity. Or, the nozzle can be inverted near the victim to provide a curtain of safety.

Rescuers wearing proper protective gear then can carry a victim into a house, van or ambulance for treatment and transport. Many bees, however, will follow to continue their attack.

In a house, vacuum up bees attracted to windows by light. In a rescue vehicle, drive away and then roll down the windows and chase the insects out.

STING REMOVAL

Once the victim is protected, remove stings as quickly as possible. Otherwise, the white, translucent, venom sac - with its nerves and muscles attached – will continue to pump venom into the wound for a minute or more. Removing the victim's outer layer of garments may help because stings embedded through the fabric will be dislodged in the process.

The best way to remove stings is to simply scrape them away with a fingernail, credit card or similar instrument. Never pinch, tweeze or otherwise attempt to pull stings out, as this will simply inject the remaining contents of the venom sacs.

After sting victims have been cared for, rescuers should launder the bees – alarm-odor chemical from suits, veils and equipment.

TRAINING

Fire and rescue personnel should familiarize themselves with normal activities of stinging social insects in their area. Local bee experts or beekeepers can provide extremely valuable advice and assistance, particularly when unusual situations arise. All states have active beekeeper organizations, as do many local communities, and they usually welcome requests for assistance.

Most beekeeper groups would welcome an invitation to help develop training exercises, where bees would be used to simulate an actual attack and allow rescuers an opportunity to practice their skills.

<http://www.ars.usda.gov/Research/docs.htm?docid=11059&page=3>

<http://ag.utah.gov/news/africanavoidattack.html>