



WHAT IS THE AFRICANIZED HONEY BEE?

In the 1950's, colonies of the honey bee subspecies *Apis mellifera* scutella were brought into Brazil with plans to breed them with commercial honey bees to increase honey production in south and central America. Unfortunately, African queens escaped from an experimental apiary before the breeding program was completed. Highly defensive hybrid populations have spread across South America and into Central and North America at an amazing pace, displacing gentle commercial and feral honey bee populations.

INTRODUCTION OF AN INVASIVE SPECIES

As a response to the poor performance of European honey bees, Warwick Kerr brought African honey bees to Brazil during the 1950s. Africanized honey bees consist of pure African genetic material. Traveling over 200 miles per year, they tend to be invasive. These insects typically reproduce by swarming and multiply rapidly. By 1990, the bees reached the United States, swarming up to California and by 2012 have reached Southern Alabama. Luckily, they do not survive temperate climates above 34 degrees latitude but that is likely to change with the climate.

A PUBLIC NUISANCE

It is hard to distinguish the physical differences between a Western and Africanized honey bee besides its behaviors.



Africanized Bee (left)
European Honey Bee (right)

Hodgson, Erin. "Utah State University Extension." *Africanized*. Utah State University Extension, 26 Feb. 2009. Web.

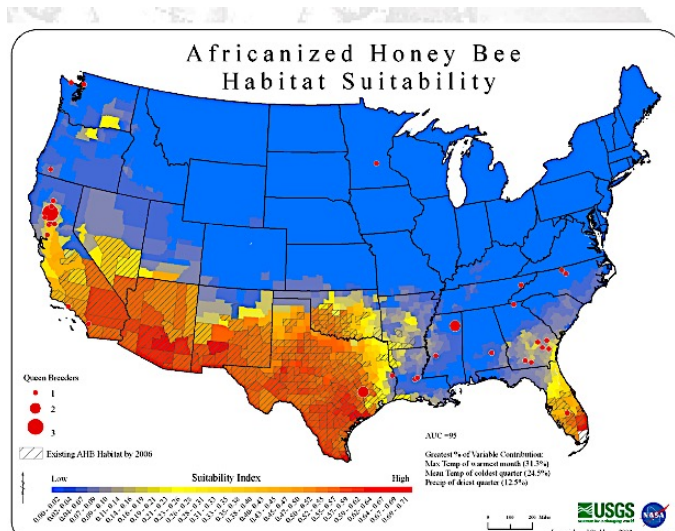
MAAREC Publication 1.3

Revised May 2020

Africanized honey bees are extremely defensive because disruptive honey hunting occurred in their native land of Africa.

Their defensive nature is also a result of climatic stress, strains in resource availability, and predator pressure. Humans and animals are common predators of the Africanized honey bees resulting in mass stinging and even death in the worst case. Hundreds of these unmanaged Africanized bees can attack a human when confronted.

Africanized honey bees are extremely active, absconding from their nest more than ten times per year. They will usually take over a European colony during a swarm and can very likely disrupt managed hives. After the swarm, they can also find obscure places to nest from old tires to barbecue grills. These unmanaged populations are another reason why the Africanized bees pose such a threat to humans.



CONTROLLING THE BEES

It is important for humans to stay alert in regions where Africanized honey bees are prominent. Below is a United States Geological Survey map representing the distribution of current populations.

Despite the fear of Africanized honey bees, they can be managed. Brazilian beekeepers have learned to adjust to the defensiveness with a state-supported breeding program that has selected certain

strains of the bee that are less defensive. Beekeeping in the United States has learned to competitively replace Africanized queens with European queens. Besides urban apiaries, most beekeepers

can adjust to the Africanized honey bee, however general awareness within the community is needed to prevent dangerous swarms.

MAAREC, the Mid-Atlantic Apiculture Research and Extension Consortium, is an official activity of five land grant universities and the U. S. Department of Agriculture. The following are cooperating members:

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Newark, Delaware

University of Maryland
College Park, Maryland

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New Brunswick, New Jersey

The Pennsylvania State University
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Participants in MAAREC also include state beekeeper associations, and State Departments of Agriculture from Delaware, Maryland, New Jersey, Pennsylvania and West Virginia. MAAREC website is hosted by the University of Delaware



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MAAREC Publication 1.3. Authors: Dewey M. Caron, Deborah A. Delaney, Daniel Borkoski and Cindy Bee

