



A background of honey bees in the United States:

The honey bee is not native to the United States. “Native or domestic” honey bees, were introduced by European settlers in the 1600s. Pioneers moving westward brought these European honey bees to Kansas during the early 1800s. Today this insect is known for its honey production and its pollination services.

Recent studies show that honey bees pollinate crops valued at approximately \$10 billion annually. For each dollar’s worth of honey sold by the U.S. beekeeper, an estimated \$143 worth of pollination was provided by these same bees.

Honey bee colonies in Kansas number approximately 50,000 with 2.8 million pounds annual honey production valued at \$1.9 million.

For centuries, the European honey bee has been selected by beekeepers for its desirable traits: gentleness, honey production, tendency not to swarm, winter hardiness, color and others.

What is the Africanized honey bee?

Queens of the Africanized honey bees were brought to Brazil from Africa in 1957 for breeding studies. These queen bees escaped and their hybrid crosses evolved through natural selection in an extremely hostile environment. Both weather and predators, including man, have contributed to the genetic selection of a honey bee quite different from the honey bee of the U.S. beekeeper. Being a “wild” honey bee, its characteristics are those that have enhanced its chances for survival. This evolutionary process has resulted in several undesirable behavior traits.

The Africanized honey bee had continued expansion northward to the southern tip of Texas by October 1990. Although Africanized honey bees defend their colonies faster and in greater numbers, there is no justification for the name “Killer Bees.”

What do Africanized honey bees look like?

Africanized honey bees are very similar to our common honey bee but are slightly smaller. Positive identification

requires trained personnel with computer-assisted measurements of chemical and physical characteristics. The important difference between the European and Africanized honey bee is in its behavior.

What are some behavioral differences in the Africanized honey bee?

The Africanized honey bee quickly defends its hive and will pursue intruders longer distances than the European honey bee.

The sting of one Africanized honey bee is no more potent than the sting of a single European honey bee. Most stinging incidents have involved animals, but on rare occasions humans have been attacked. Stinging attacks occur only when the Africanized honey bee nest, or territory, is threatened by the noise or vibration of an intruder such as tractors or other vehicles.

Honey bees increase the number of colonies and the probability of survival by swarming. Africanized honey bees swarm more often than European honey bees resulting in the Africanized honey bee’s gaining a population advantage over the European honey bee. Occasional swarms on-board ships from South and Central America are a concern, but not a major threat to the American public or the U.S. beekeeping industry.

Africanized honey bees are much less selective in nesting sites than are the European honey bees. They can be found in underground cavities that afford little space for comb-building or protection from the climate, compared to the European honey bee nests in a hollow tree or wall void with at least 40 liters of space that is above ground, clean and dry.

Will the Africanized honey bee be a problem in Kansas?

Research indicates that the northern expansion limit of the Africanized honey bee will extend to central Texas. The fact that this “tropical bee” does not “cluster” during cold weather would probably negate any chances of the Africanized honey bee surviving Kansas winters, but migratory beekeeping operations in the spring and summer would be a major concern.

