

Apis mellifera scutellata

Africanized Honey Bee

**NOT KNOWN TO
OCCUR IN IDAHO**



Photo by Daniel Plumer

HISTORY

Honey bees are not native to the United States. When Europeans emigrated to the Americas, they brought honey bee colonies with them. This resulted in the establishment of domesticated bees for obtaining honey, wax and pollination, as well as the presence of feral bee colonies throughout the Western Hemisphere. There are roughly thirty known subspecies of the honey bee (*Apis mellifera*) worldwide, most having evolved as geographically-adapted variants. Those initially introduced into the Americas, beginning in the 1600's, were all European subspecies (such as *A. mellifera ligustica* and *A. mellifera iberiensis*), well-suited to the temperate North American climate and having been bred over centuries for behaviors desired by bee-keepers, including a relative gentleness. Due to poor performance of European honey bees in Central and South America (where the climate is mostly tropical/subtropical), a researcher in Brazil imported one of the honey bee subspecies from southern Africa (*A. mellifera scutellata*) to attempt to breed a strain better suited to that habitat, hopefully embodying the best traits of both European and African bees. In 1957, however, during early stages of the experiment, 26 swarms of African honey bees escaped from quarantine and by interbreeding with established European colonies, resulting in "Africanized" honey bee (AHB) hybrids, they quickly spread throughout Central and South America and eventually into the southern part of North America. The first U.S. report came from the San Joaquin Valley of California in 1985. Initial movement of AHB through Central and South America occurred at a rapid pace, approximately 200 miles per year. As they moved into the U.S., where weather conditions are not as conducive, rate of spread has slowed dramatically.

DAMAGE

In AHB, behaviors associated with African bees tend to be dominant, including the habits of maintaining smaller colonies, storing less honey, building hives in smaller cavities or in the open, splitting colonies and swarming fairly often, and most importantly, being extremely defensive of the hive and aggressively attacking anything considered to be an intruder or enemy of the colony. European and AHB are nearly indistinguishable from each other morphologically. DNA tests are needed to separate them definitively. However, in places where AHB do become established, highly aggressive behavior towards humans and animals can be manifested. Although not any more venomous than European bees, AHB can lead to increased risk of pain and death because when disturbed, they are more easily provoked, attack and sting in greater numbers and will follow their enemy a farther distance to defend their hive.

Photo by Scott Bauer, USDA, bugwood.org



Photo by W.H. Kern, University of Florida



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