

"KILLER BEES?"

The "African bee," *Apis mellifera scutellata*, is common in most parts of Africa. It is a small bee and is adapted to warm climates with extended dry seasons. In its home range, it has many enemies, including humans and birds. Aggressive behavior and frequent swarming have allowed colonies to escape predation and survive drought.

In 1956, a few *Apis mellifera scutellata* queens were imported to Brazil in hopes of breeding these queens with local stocks to create bees better adapted to tropical climates than were the local bees. (Bees of the Americas were imported from Europe in the 1600s.) A few of these queens escaped captivity and hybridized with local bees. (Referring to the hybridized bees as "African bees," "Africanized bees," or "killer bees" is inaccurate. Their reputation as "killers" has been exaggerated. Most authorities now refer to hybridized bees as Brazilian bees.) Many of the qualities that allowed the African bee to succeed in Africa allowed these Brazilian bees to spread 150 to 300 km/year. Their frequent swarming and their ability to nest in relatively open shelters gave them a distinct selective advantage over the

bees imported from Europe many years earlier. By 1969, Brazilian bees had spread to Argentina; by 1973, to Venezuela; and by early 1980, they had crossed the Panama Canal. Mexico presented few barriers to their spread, and they have now crossed the border into the southwestern United States. How far will Brazilian bees ultimately spread? An educated guess requires looking at the distribution of the African bee in Africa. African bees cannot overwinter outside of tropical regions. Similarly, the Brazilian bee will likely be limited to the warmer latitudes.

The primary implications of the spread of Brazilian bees have less to do with threats to human health than to the health of the beekeeping industry. Wearing protective clothing is one way to deal with the unpleasant temperament of these bees. More formidable problems associated with the culture of these bees include their tendency to swarm and their lower productivity. To a beekeeper, swarming means the loss of bees and a lowered honey production. Frequent swarming makes profitable beekeeping almost impossible.