Cape Honey Bee



Cape Bees

Description

Cape bees (Apis mellifera capensis) is a subspecies of European honey bees (EHB) (Apis mellifera) native to the Fynbos region of South Africa. Cape bees look very similar to EHB. but they are distinct from EHB by their reproductive system. Cape bee workers produce diploid eggs via thelytokous parthenogenesis. Basically, this means female workers can produce male or genetically identical female offspring without mating.

Although the ability of worker bees to lay unfertilized diploid eggs which can still develop into worker bees or queen bees sounds harmless, it is the interaction between Cape honey bee colonies and African honey bee colonies that is cause for great concern. In areas that they have interacted, Cape bees have begun to socially parasitized African honey bee colonies.

Typical Laying Worker Laying Worker Unfertilized Egg (Haploid) Unfertilized Egg (Haploid) Fusion of Prenucleus and Polar Body Male Offspring (Diploid) Female Offspring (Drone) (Worker or Queen)

Image: Cape bee female worker



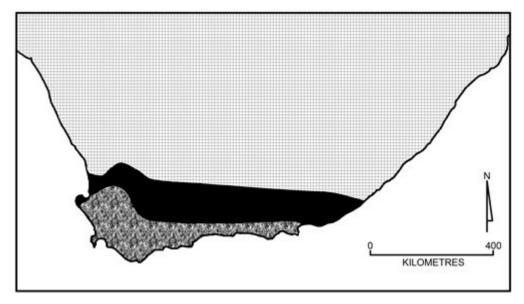
Phot credit: Ben Oldroyd, University of Sydney

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Figure credit: Ashley Mortensen



Montana is not considered suitable habitat for Cape bees to be prolific, and they have only been recorded in South Africa. Please see the map below on distribution of where Cape bees hybridized with African honey bees (*Apis mellifera scutellata*) (black region).



The distribution of Cape honey bees in South Africa (shaded gray). The area shaded black represents where Apis mellifera capensis and Apis mellifera scutellata hybridize. The checkered area indicates the natural distribution of Apis mellifera scutellata. Figure by <u>Jane Medley</u>, University of Florida, distribution data from Henburn and Radloff (1998).

Management

Cape bees have not been detected in the United States. However, there are strict quarantine requirements in place to protect the honey beekeeping industry in Montana. If you think you have found Cape bees in your hive, please report it to the State Entomologist immediately upon detection. Recording the number of cases is important to bee health in Montana and can in tracking the movement of Cape bees.

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