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CAT
AMONG
THE
PIGEONS



A riotous assembly of unrespectable African creatures





HONEYBEE

Bees are born from the tears of the sun, or so the Ancient Egyptians believed. This mystical insight probably has something to do with the fact that honey, the product of bees' incessant labor, is as close to liquid sunlight as it's possible to get. Bees need to visit upwards of 50,000 flowers to produce enough honey to spread on your morning toast, something to bear in mind when you're standing in the aisle of a supermarket scratching your backside and mumbling about the price.

Maybe you can do without honey, but if there weren't bees, there wouldn't be any marmalade or jam either. In fact, there wouldn't be a whole lot of other things. The best estimate is that bees pollinate about a third of all food crops consumed by human beings. Put another way, if bees vanished, so would a lot of the food you eat. And it's worth bearing in mind that domestic animals also depend to a large extent on food crops, so you could expect a big problem with your bacon and eggs as well.

Honeybees are members of the order Hymenoptera, which includes bumblebees, wasps, sawflies and ants. South Africa is home to two subspecies of honeybee, the African bee (*Apis mellifera scutellata*) and the Cape bee (*Apis mellifera capensis*), with the latter generally confined to the fynbos of the western and southern Cape and the former covering the rest of the country. In between is a hybridization zone where strange things can happen, but more of that later.

The social life of bees has often been compared with that of human societies, in a rather garbled and half-baked attempt to make sense of how and why we organize ourselves into hierarchies, i.e. why most of us have to work our arses off from dawn to dusk while the boss gets to drive a Ferrari and play golf. For the bees themselves, such social inequalities are not a conundrum. The undisputed head of a bee colony is the queen, who secures her privileged position by secreting a special pheromone that inhibits the sexual development of workers, while simultaneously inducing in them a sense of social wellbeing.

There are three types of bee in a hive: the queen, the worker bees, which are all female, and the drones, which are all male. Drones are born from unfertilized eggs and have no stinger, pollen basket or wax glands. They tend to eat more than the workers and hence are bigger. Other than that, virtually their only purpose is to mate with queen bees. Feminist readers can take comfort from the fact that drones are usually booted out of the hive in autumn or when food runs low.

Workers—surprise, surprise—do all the work around the hive, gather food, tend the larvae and defend the colony when it's threatened. Like the queen, they can also lay unfertilized eggs, which hatch as drones. But only the queen can produce future queens, which are differentiated early on by diet. All female larvae are initially fed royal jelly, a nutrient-rich substance. Those destined to become workers—the great majority—are soon switched to a more modest diet of pollen and honey. Only the future queens are fed royal jelly throughout the larval stage.

When they're ready, the virgin queens leave the hive, heading for the bee equivalent of the red-light district, where drones hang out, and all the while they emit that magic pheromone. Mating takes place in flight, between 3 and 12 meters above ground. It is literally an explosive affair, occasionally audible to the human ear, and fatal for the drones. The queen mates with 7–10 individual drones, each allotted about two or three seconds. The result of this brief aerial orgy is that the queen is able to store enough sperm within her oviducts to last her for the rest of her life, during which she will selectively lay thousands of eggs and reign supreme over a new colony.

Cape bees can be distinguished from African bees by their darker abdomen and passing resemblance to an African bee queen. They also have an unusual characteristic in that workers are capable of laying both male and female eggs, so that if the queen dies, a successor can be raised to take her place. The downside of these characteristics is that if a Cape bee worker arrives in an African bee colony she is not attacked, and, uninhibited by the hive queen's pheromones, soon begins producing exact replicas of herself. The resultant social disorder ultimately leads to the collapse of the colony.

Worldwide, bees have bigger problems. In recent years a variety of factors, natural and artificial, have combined to put bees in harm's way. New parasite and virus strains are attacking hives, while the increased use of pesticides is having a serious impact on bees' health and immune systems. Compounding these problems, urban sprawl in many parts of the

world has led to a marked decrease in available foraging sites, and noise and electromagnetic pollution cause considerable stress to bees, making them more susceptible to infection.

One pertinent piece of folklore tells us that if a bee flies into your house, it means that someone is coming to visit. If you kill the bee, the visitor will bring you bad news. There is no need here to belabor the ominous moral of that short story.

