## The sistren of bees...



Sistren is a feminine word from medieval English, which we may use to describe a bee colony.

A hive is not a brotherhood or a 'brethren of bees'. It is a sisterhood; mostly females, serving their clan. And there is a sting in the tale, not the tail, for the males.

A female worker bee is more closely related to her sisters than to her mother, father or her own offspring. In fact, 75% relatedness makes it better for her to help her reproductive sisters than to mate.

The scientific terms used to describe this phenomenon are haplodiploidy and kin selection – it's a fascinating feature of social insects.

For a very brief period, a bee colony may contain an increased but small percentage of male drones among tens of thousands of females.

A new queen will then emerge, the colony will split and the old queen will leave in a swarm with thousands of females and a few drones, to find a new home.



The lazy male bee does not help collect food for the hive or produce honey. His job is to widen the gene pool.

If he gets 'lucky' he will mate mid-air with a new queen, during a brief drone assembly of males, in a mini-mating swarm.

Lucky? The force of ejaculation causes the male bee's 'business end' to rip off and stay inside the queen. She keeps its contents for the rest of her life. He drops to the ground and dies.

The attached video shows bee sex on the wing: <a href="https://m.youtube.com/watch?feature=youtu.be&v=tR">https://m.youtube.com/watch?feature=youtu.be&v=tR</a> 7Nts42sYo

If he fails to mate, and hangs around the hive, the females will eventually deprive him of food and kick him out, to die hungry in the cold.

He is less related to the sisters than they are to each other, and lower down in colony hierarchy.

The sting in the tale? The male honeybee has no sting in his tail.



Move over honeybee - did you know there are about 20,000 other species of wild bee in the world? More on that here:

www.sierraclub.org/sierra/how-honeybee-buzz-hurtswild-bees

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