If you were asked to draw a bee, what would you draw? You might draw an oval and a couple of antennae and then color the whole thing with black and yellow stripes. That would be a good general drawing, but you would be missing all the amazing details. Bees’ bodies are complicated structures that allow them to do fascinating things.

Bees can fly. Bees can dance. Bees can scrape pollen off their bodies and into little baskets on their legs. All the parts of a bee’s body help the bee do what it needs to do to live and work in the colony.

Bee bodies are made up of three main parts: the head, the thorax, and the abdomen. The head has a pair of compound eyes, simple eyes, antennae, mandibles, and a proboscis. The thorax has the bee’s wings, all six legs, and muscles that help the bee fly. The abdomen has special glands that produce the wax bees use to form the hive and female bees have a stinger.

Every bee has special parts that allow them to live and work as part of the colony. Some structures are familiar. They have four wings for flight (at up to 15 miles per hour) and also fan the nectar to dehydrate it and transform it into honey. They have three simple eyes (or ocelli) that let the bees detect changes in light. They also have two compound eyes to detect color and movement. Bees’ jaws are called mandibles and are used for chewing. And bees have two antennae used for gathering sensory information.

Other structures of the bee are a little more unusual. The glossa (or proboscis) is a long tongue that acts like a straw to suck up nectar from flowers. A honey stomach is a special organ that stores the nectar collected by the bee until it can be unloaded in the hive. The pollen baskets are structures on the hind legs that are used to hold the pollen from flowers. And, the wings of a bee are connected by hamuli, tiny hooks that hold the wings together so the bee can fly.

Each part of a bee serves a special purpose. From the tips of their antennae to the end of the stinger, bees are built to be a productive part of our ecosystem.