

BEES WITH LEAVES

by Tracy Vonder Brink



Think about a bee. Do you imagine a honeybee? Did you know there are many other kinds of bees? Not all live in hives and make honey the way honeybees do. Leafcutter bees are very different.



Leafcutter bees live all over the world. They are about the size of honeybees, but their bodies are black. If you see a small black bee with a fuzzy belly, it's probably a leafcutter bee.



Each spring, leafcutter bees leave their nests. They find mates. Then the male bee dies, and the female goes to work. She must build a nest for her eggs. She might dig a hole in the ground or in soft, rotten wood. She might burrow into a plant with a thick stem, such as a rose. Leafcutter bees also use nests people make for them.





Leafcutter bees live on their own. They do not need to protect a hive. So they are less likely to sting than other types of bees. Leafcutter bees can sting, but they usually don't—unless you try and touch one.

The bee makes a tube-shaped nest. It is about the size of a pencil. She lines it with thin, smooth leaves. She cuts a small circle from a leaf with her jaws. It doesn't hurt the plant. If you see a leaf with neat circles in it, a leafcutter bee might have been there.



The bee takes the leaf to her nest and tucks it in. Each egg will have its own pocket of leaves in the nest tube.

It's like a sleeping bag for the baby bee.





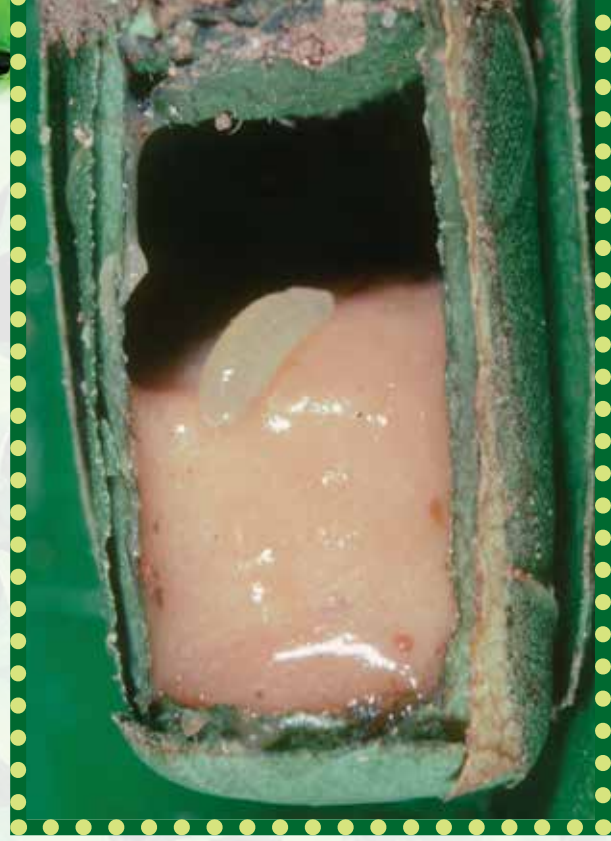
The baby bee will need food, so the mother makes a bee loaf from pollen, nectar, and her spit. She collects the powdery pollen and syrupy nectar from flowers. As she lands on one flower, pollen sticks to fuzzy hairs on her belly.

When she lands on a different flower, some of the pollen rubs off. Moving pollen from flower to flower helps new plants grow.

When the bee loaf is big enough to feed a baby bee, the mother lays one egg. Then she closes up the nest pocket with chewed-up leaves. She does this in each pocket until the nest is full. Then she seals the nest with one last wall of chewed-up leaves.



A wormy-looking baby called a larva hatches from the egg. The larva eats the bee loaf and grows. It spends the winter in the nest, eating and growing.



In the spring, the adult leafcutter bee chews its way out of the nest. It's time for new bees to build new nests!



Leafcutter bees are great pollinators. Some people put out bee houses for leafcutter bees. Would you like to make one? Download a free activity book at **lemelson.mit.edu/resources/bee-inventor** to get started.