

Montana  Pollinator  
Education Project  
**Leafcutter  
Bee**



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**solitary nester**

# Leafcutter Bees - *Megachile* spp.

Genus: *Megachile* Family: *Megachilidae*

Flat abdomens and pale often gray hairbands

10-20 mm long

140 species in North America

1100 species worldwide



Leafcutter bees get their name from the fact that they cut plant materials such as leaves and petals to make nests for brood cells. Leafcutter bees cut leaves or petals in a distinct way making a smooth half-moon cut about 3/4 inch in diameter from the edge of leaves. Many of the leafcutter species are selective to which plant varieties they will use for nests, and it is the female of this species that cuts the plant materials for the nest.

Leafcutter bees can be identified by their pale and blended hair bands and flat abdomen. You might also notice that their head seems larger; this is to accommodate the large mandibles that they need for cutting plant materials.

Leafcutter bees are known as gentle bees. Leafcutter bees prefer pollinating legume and aster blossoms but also pollinate other plants. Legumes are plants like peas, beans, alfalfa, licorice, lentils, sweet clover, and peanuts. As few as 150 of these tiny bees can do the work of 3000 honeybees in legume crops<sup>1</sup>.

Many leafcutter bees are native to the U.S. One leafcutter bee essential to agriculture is the alfalfa leafcutter bee which is native to Eurasia and is about half the size of a honeybee. The alfalfa leafcutter bee is sold by suppliers of bees to alfalfa growers.

Early in the summer housing blocks with stems are set out in the field to provide housing for leafcutter bees, the supplier retrieves the boxes in the fall to overwinter the larvae. Each stem holds the larvae that the supplier needs to regenerate live bees. The stem is carefully handled and stored in a cool place until the supplier needs live bees. It only takes 3 weeks for the larvae to mature into a bee.



<sup>1</sup> Smith-Heavenrich, Sue. 1998. Going Native with Pollinators. Maine Organic Farmer & Gardener. March-May. p. 16-17.