

Colorado Insect of Interest

Wool Carder Bee

Scientific Name: *Anthidium manicatum* (L.)

Order: Hymenoptera (Bees, Wasps, Ants, Sawflies)

Family: Megachilidae (Leafcutter Bees)

Identification and Descriptive Features: The wool carder bee is robust bodied and approximately the size of a honey bee. The abdomen is not very hairy and brightly patterned with yellow and black. Males are a bit larger than females and have darker markings.



Figure 2. Male wool carder bee resting on lamb's-ear leaf.

Nest cells are produced that are lined with plant hairs. These are collected from hairy leaved plants of the mint family; *Stachys* (lamb's-ear) is probably the most common plant utilized for cell construction. The females provision the cells with pollen and nectar collected exclusively from plants in the mint family.

Wool carder bees are fast fliers capable of hovering. Males actively patrol and aggressively defend territories and will attack other wool carder bees. Other bees, including honey bees,



Figure 1. Female wool carder bee.

Distribution in Colorado: The wool carder bee is a European species that has only recently been recognized as present in Colorado. However, it is known to be present in many areas of the Front Range and may now be a widespread inhabitant of flower gardens. Where ever it occurs its distribution is limited by availability of host plants in the mint family (Labiataceae).

Life History and Habits: The wool carder bee is a solitary bee that nests in existing cavities. In gardens such sites may include cracks in walls or building foundations and knotholes or drill holes in wood.



Figure 3. Wool carder bee showing spurs on abdomen.

area also sometimes attacked and the male wool carder bee has sharp spurs on the abdomen that can produce lethal wounds.

Related Species: At least six other *Anthidium* species can be found in Colorado all of which are native. Four of these are black and white (*Anthidium porterae* Cockerell; *Anthidium tenuiflorae* Cockerell; *Anthidium maculosum* Cresson; *Anthidium placitum* Cresson). Two others are yellow and black, similar to the wool carder bee (*Anthidium emarginata* (Say); *Anthidium mormonum* Cresson).