

# AGRICULTURAL GUIDE

Published by the University of Missouri-Columbia Extension Division

JUL 2 4 1987

JUL 2 4 1987

Insects

## Carpenter bees

Darryl Sanders  
Department of Entomology  
College of Agriculture

The name carpenter bee is applied to several species of bees found in the United States. The only one of importance in Missouri is a large species, *Xylocopa virginica* (L.), which is widely recognized as the carpenter bee. It resembles a bumble bee in that it is robust, about 1 inch in length and black with some markings of yellow hair. Unlike that of the bumble bee, the top surface of the abdomen of the carpenter bee lacks the yellow hair markings. It is almost devoid of hair and appears to be entirely black.

### Habits

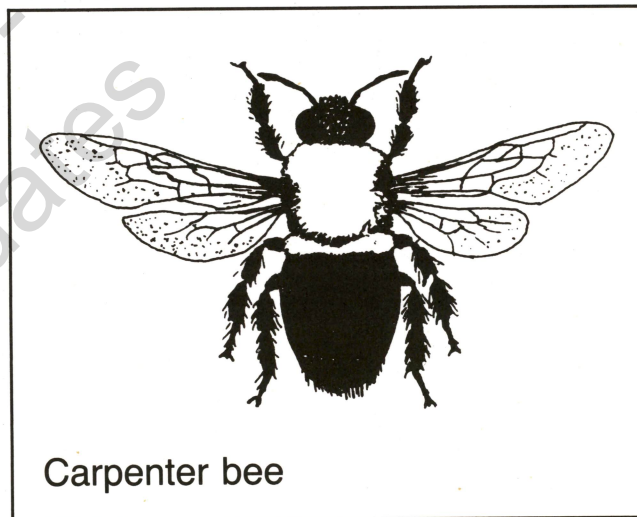
Carpenter bees are, generally speaking, beneficial insects because they pollinate numerous species of plants. They may become destructive, however, through their habits of excavating galleries in structural timbers. That excavating weakens those timbers.

Carpenter bees often fly erratically near eaves and gables of houses. Residents may become frightened by this activity because male bees patrol these areas and may fly about the faces of people. They are unable to sting. The females do not actively defend the nest but will sting if handled.

People may become more alarmed when holes, about one-half inch in diameter, begin to appear in exposed wood. In addition, unsightly defecation stains are usually present near these holes.

The gallery entrance hole is a nearly perfect circle. It usually goes straight into the wood a short distance and then makes a 90 degree turn and runs with the grain of the wood. Several galleries may lead from a single entrance hole.

The female constructs individual brood cells in the gallery, provisioning each with pollen and nectar before laying an egg and sealing the cell. The resulting new bees emerge in late summer, feed for some time and then re-enter the galleries to pass the winter. The next spring, they reuse the existing galleries or



Carpenter bee

construct new ones. Such an infestation may persist for several years.

Carpenter bees attack many species of dried, seasoned wood but seem to prefer softwoods such as pine, fir, redwood and cedar. They may damage porch and shed ceilings, railings, overhead trim, wooden porch furniture, dead tree limbs, fence posts, wooden shingles, wooden siding, window sills and wooden doors. They prefer unpainted or well-weathered wood to painted or hardwood timbers.

### Control

Carpenter bees can be controlled by placing a spray or dust formulation of an insecticide into the galleries. You can use insecticide-soaked cotton to plug the holes. Treat after dark when bees are calm, preferably on cool nights. You can get pressurized cans of spray that shoot a stream of spray for quick knock-down of bees. These are good for just that purpose but do not normally reach into the galleries. You can use them

to immobilize the bees while you otherwise treat the nest. After treatment, fill the holes with plastic wood, caulk or a wooden dowel glued in place.

Use a 5 percent carbaryl (Sevin) dust or a residual spray with 1 percent carbaryl (Sevin), 0.5 percent chlorpyrifos (Dursban) or 1 percent propoxur (Baygon).

You can also use pyrethrins, resmethrin and dichlorvos (DDVP, Vapona), but they have no residual effect to help prevent reinfestation.

Treat existing or likely nesting sites in the spring. Make one application of one of the above mentioned residual sprays when the bees first become active.