

### Carpenter Bees

Carpenter bees are large black solitary bees that look similar to bumble bees but have bare, shiny backs whereas a bumble bee's back is hairy. Unlike bumble bees that nest in an existing cavity, usually in the ground, carpenter bees drill into wood to lay their eggs. Their holes are perfectly round ca. 1/2" in diameter, and prefer weathered, non-painted, softwoods. However, no wood is totally excluded from carpenter bees. As the bees drill into the wood, coarse sawdust may be seen coming out of the hole and piling up beneath the hole. Since carpenter bees are efficient in generating a hole, a lot of holes can appear in a relatively short period of time.



*Carpenter Bee*

Most carpenter bee activity occurs in spring after male and female bees emerge from winter hibernation and mate. The female bee drills a hole into a suitable site while the male protects its territory. Male carpenter bees often frighten people, but since they do not have a stinger, they are essentially harmless. Females have a stinger but only use it if harassed by humans. Once the initial hole is drilled through the surface, the bee will make a turn, excavating a tunnel along the grain of the wood. This tunnel, which may run for several inches, becomes the cavity where the female deposits her eggs. Each egg is laid in a chamber on bee bread (food supply) with each chamber separated by a plug of sawdust. In addition to making new holes, carpenter bees also enlarge old tunnels.



*Carpenter Bee Nest*

In autumn, activity may again be seen as both male and female carpenter bees clean out their old nest cavities. Since carpenter bees tend to migrate back to the same area from which they emerged, it is important to implement control measures to prevent logs/wood from being inundated with carpenter bee holes. This is when structural damage can occur to the wood.

#### ***Treating Carpenter Bee Holes***

Carpenter bee holes should be treated and plugged since existing holes attract more carpenter bees. The best time to treat an existing hole and tunnel is when the female is actively drilling a hole by applying a liquid or dust insecticide into the holes. Leave the holes open for a few days after application to allow the bees to come into contact with and distribute the insecticide throughout the nest. Then fill the hole with wood putty or Energy Seal. It is best to treat all of the holes, even if they appear empty.

## ***Preventing Carpenter Bees***

Although carpenter bees prefer bare wood, they will attack wood that is stained. Painted wood surfaces, on the otherhand, are rarely attacked. Applying a topcoat over a stain may further deter carpenter bees from nesting there.

One way to keep carpenter bees from drilling into wood is by spraying pesticides that contain cypermethrin, deltamethrin or bifenthrin (Ortho Home Defense Max) onto wood surfaces. When it comes to carpenter bees, these products act more as a repellent than contact poisons. However, the effectiveness of these applications is only about three to four weeks so the treatment will have to be repeated. Pesticides should only be used during periods of peak activity in the spring and again in late fall as needed. When using insecticides, pesticides, or any chemical treatment, be sure to read and follow the label's directions and all precautions. Borates are not effective against carpenter bees since they do not consume the wood.