



## FIREWOOD—Transport, Insects, Storage

Improper handling and storage of firewood can cause a multitude of problems. Relocation of firewood, insect activity, and proper storage techniques are all issues to consider when dealing with firewood.

### Transport

Something as insignificant as purchasing or collecting firewood can cause the introduction of significant insect pest species.

The Asian longhorned beetle (*Anoplophora glabripennis*), which has devastated many native hardwood trees in the United States, was first introduced in cargo from Asia. This beetle then spread by unsuspecting individuals transporting infested wood material.

More recently, the emerald ash borer (*Agrilus planipennis*), which has caused the mortality of millions of healthy ash trees in both urban and forested environments, is a topic of concern as wood from infested areas is sold and transported to uninfested areas.

Additional destructive insect infestations can be avoided if two simple rules are followed:

1. Buy firewood where it is produced and where it will be used.
2. Do not transport or store firewood outside the local area (50-mile radius).

### Insects

Although destructive insects can be found in firewood, they are far less common than a variety of other groups seen in this type of wood. It would be difficult to find firewood without insects, but most of these insects are harmless.

Beetles are the most common group of insects found in firewood. Beetle activity is indicated by a powdery dust or frass that can often be seen coming from holes on the wood's surface. Beetle larvae are generally observed under the bark. The emergence of adults can occur as late as 1 to 2 years after the wood is collected,

depending on storage conditions. Adult beetles can be found on or around the firewood or because some beetles are attracted to light, on nearby windows.

Most beetles emerging from firewood will not infest nor cause damage to a home or structure and therefore do not need to be treated with any type of chemical. Moving the firewood outdoors should remediate the problem.

The following describes some of the more common insects found in or around firewood.

**Longhorned beetles** (Cerambycidae) are named as such because of their long antennae, which are often longer than the length of their body. Adults are generally 10 to 25 mm and have a wide range of coloration patterns. Larvae tend to be elongated (10 to 80+ mm), with a large head capsule and no legs. Larval galleries can often be seen underneath the bark and tend to wind irregularly through the wood, producing a lot of frass. Exit holes are round to slightly oval with a diameter of 3 to 10 mm. Longhorned beetles brought in on firewood will not cause structural damage to a home.



**Flathead and metallic wood borers** (Buprestidae) are exceedingly common in wood that still has its bark and are therefore frequently seen in firewood material. They are also more abundant in wood salvaged from an area after a forest fire, windstorm, or bark beetle infestation. Adult borers range from 2 to 40 mm in length and generally have brilliant, metallic colors with various iridescences. Larvae make winding oval, flat tunnels through the wood, which are tightly packed with sawdust-like borings and pellets. Larval exit holes are oval and fairly large (5 to 6 mm). Wood borers brought in on firewood will not cause structural damage to a home.



**Bark and ambrosia beetles** (Curculionidae) are frequently found on the inner surface of bark on unseasoned wood. These insects are commonly brought indoors with firewood but cannot infest other wood that is dry or without bark. Adults are brown, reddish brown, or black and small and are 0.6 to 9 mm long. Larval galleries tend to be circular, random, and approximately 2.5 mm in diameter. Bark beetles brought in on firewood will not cause structural damage to a home.



**Carpenter ants** (Formicidae: *Camponotus* sp.) have more than 900 species worldwide, 50 of which occur in the United States and Canada. Workers in this group are some of the largest ants commonly seen (3.5 to 13 mm). These ants are usually black but can contain combinations of red and black or brown and black. The common name, carpenter ant, comes from their habit of hollowing out galleries in wood in which to nest. These ants do not feed on wood, but rather carve out areas of the wood that are already damaged by decay fungi. Galleries will appear as smooth tunnels that do not contain frass. Carpenter ants brought in on firewood will not cause structural damage to a home. Ant baits specific to this species can be used indoors if necessary.



### Storage

Firewood should always be kept outdoors and brought indoors no more than a few days before it will be used. If possible, the wood should be stored under a roof or open shed to provide rain coverage while still allowing for air circulation. If this is not feasible, woodpiles should be constructed in a fashion that shields as much of the wood from rain as possible. Placing a tarp over the wood pile is also an effective way to prevent moisture from decaying the wood in the winter months and to heat the wood in the summer months. Insecticides should not be used to treat firewood.