HOME & GARDEN

Firewood and house log insects   no. 5.563

by D.A. Leatherman, W.S. Cranshaw[1]

Quick Facts...

With few exceptions, insects found in firewood will not infest household furnishings.

The best way to avoid insects emerging in the home is to store wood outdoors until needed.

Some bark beetles in firewood, such as the mountain pine beetle and elm bark beetle, can infest nearby healthy trees.

Hundreds of insect species potentially can inhabit the wood of our native and ornamental trees. However, the great majority of cases involve a few basic groups: roundheaded and flatheaded wood borers; bark beetles; carpenter ants; and powderpost and anobiid beetles.

With few exceptions insects found within Colorado firewood will not survive indoors and are only capable of infesting well-dried logs with intact bark. The primary problems with firewood insects involve a few species of bark beetles that can develop in firewood and later infest healthy trees.

By far, the most important of these insects is the mountain pine beetle, which kills large numbers of trees (primarily ponderosa pine) in natural forest areas. Elm bark beetles and, rarely, *Ips* beetles also may threaten healthy trees after emerging from firewood. Simple precautions can prevent injury by these firewood insects.

Common Firewood and House Log Insects

Wood borers

Wood borers are the most frequently observed insects infesting firewood and house logs. Most common are roundheaded borers (Cerambycidae), also known as longhorned borers or sawyers. Adult stage is a medium to large beetle (1/4 to 2 inches), often with long antennae that may exceed the body length. Common roundheaded borers are gray-brown with black speckling (sawyers) or deep blue-black (black-horned pine borer).

Adult flatheaded borers (Buprestidae), also called metallic wood borers, generally are smaller than roundheaded borers. Flatheaded borers commonly are gray, bronze or blue-green with a metallic sheen and have inconspicuous antennae.

Borer larvae are slender, white, segmented grubs with brownish heads and rather prominent jaws. These larvae produce the chewing noises and piles of wood-colored sawdust that frequently cause alarm. This sawdust material may be relatively fine or coarse and fibrous.

These borers also are responsible for the wide zig-zag or meandering tunnels seen beneath the bark and deep in the wood. The tunnels of both groups are oval in cross-section, not perfectly round.

Wood borers are primarily a nuisance. The noise and sawdust they produce is suggestive of termites and, thus, disconcerting.

Because of their long life cycle, borers may be present in wood for a year or longer. They do not emerge and attack healthy trees. No Western species normally recycle in the same wood that produced them. Furniture, wall framing or other seasoned woods are not suitable for wood borer attack.

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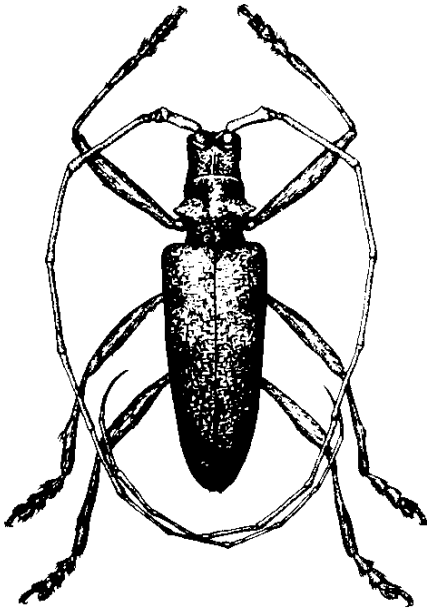
Despite producing what may seem like great quantities of dust, borers rarely tunnel extensively enough to cause structural failure. Adult borers found inside the home may look ominous and pinch the skin if handled but are not dangerous.

Bark beetles

Bark beetles (Scolytidae) commonly infest dead or dying trees and then appear in firewood produced from such trees. Several well-known tree killers and disease vectors are the mountain pine beetle (fact sheet 5.528, *Mountain pine beetles*), European elm bark beetle (5.506, *Dutch elm disease*) and *Ips* beetles (5.558, *Ips beetles*).

Adult bark beetles are small (1/16-1/4 inch), dark and bluntly cylindrical. Infestation by the various bark beetles on conifers usually is marked by a glob of pitch (pitch-tube) at the point of attack.

Eggs are laid in central pathways (egg galleries) constructed under the bark and the larvae feed on wood as they chew at right angles from the central gallery.

Most bark beetles have a one-year life cycle, but a few can complete generations in two-month intervals. Bark beetles cannot reproduce in household wood products.

Powderpost and Anobiid Beetles

Powderpost (Lyctidae) and Anobiid (Anobiidae) beetle infestations of structural wood and furniture are uncommon in Colorado but can be serious. Native species of these insects do occur naturally in dead tree limbs and dry, seasoned wood. However, problems with these insects in Colorado appear to be associated with the introduction of infested wood products from Eastern states. Fresh piles of fine sawdust and small round holes (1/32-1/8 inch diameter) are possible signs of infestation.

Carpenter ants

Intact, sound logs are not used by carpenter ants (*Camponotus* sp.). Rotting, water-damaged wood is used by these ants to nest within, and these logs rarely are utilized for firewood. Native populations of carpenter ants may develop within old rotting wood that has been stored improperly for long periods. (See 5.554, *Carpenter ants*.)

Termites

Unfounded concern is widespread with moving termites in firewood or other wood products. Colorado species of termites nest underground and under natural conditions rarely infest firewood and timber products. Occasional termites found within this wood do not contain reproductive stages of the termite. Furthermore, the low humidity in houses cause the "stragglers" in firewood to quickly dry out and die. (Note: Colorado termites do not produce sawdust!) (See 5.532, *Termites*.)

Control

Firewood insects do not normally pose any hazards to humans, household furnishings or plants. This is particularly true for the wood borers, the most conspicuous group of firewood insects.

It is hard to witness the activity of borers without feeling a need to take action, but in reality borers speed up the drying process and promote better burning.

Firewood Storage and Collection

Problems with firewood insects emerging in the home are best handled by storing firewood outdoors until needed. Outdoor storage will

Typical long-horned beetle (top) and metallic wood borer (bottom).

greatly slow insect development during the winter and limit the opportunity of insects to emerge inside a home. The occasional insects that do manage to emerge indoors can be controlled by vacuuming.

Storing wood in a manner that accelerates drying also is important in limiting firewood insect infestations. Stack wood so that air readily flows through the pile. Well-dried wood will not invite bark beetle attack, and the drying process can kill many developing bark beetle larvae if already present in the wood.

When collected firewood is known to harbor mountain pine beetle or other undesirable species, the best option is to burn the wood before adult beetles begin to emerge in mid-July; elm bark beetles emerge from elm logs in mid-May.

To avoid wood infested by these insects, choose trees for cutting that have been dried for at least one year or that have noticeably loose bark.

If log piles are small and located in a sunny area firewood insects can be killed by covering the pile with a clear plastic tarp. The high temperatures produced will kill many insects inside the wood. Control of insects in logs at the pile's top may exceed 50 percent, but insects in lower logs generally are not affected.

A more difficult, but highly effective means of killing most firewood insects is to remove the bark. Debarking also will prevent reinfestation and speeds drying.

Chemical Controls

Chemical controls may be needed in some situations to protect house logs. At present, insecticidal fumigants are not available for general use on firewood. Consequently, insecticide treatments involve sprays that will kill the insects as they emerge or enter wood. These sprays do not primarily kill insects already within the wood but can prevent them from moving to healthy plants or reinfesting the wood.

Certain commercial formulations of chlorpyrifos (Dursban) are the only materials currently registered for use in control of house log insects. However, household formulations are not available. Currently, no insecticides are registered for use in control of insects that infest firewood.

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