



Insects and Firewood: Some Facts

With the increased interest in the use of wood as a home-heating fuel, many people are beginning to notice the insects that periodically emerge from firewood.

Recent Invasions Of Insects That Bore Into The Wood Of Living Trees, Including The Emerald Ash Borer, Asian Longhorned Beetle, And Sirex Woodwasp, Have Prompted State Or Federal Quarantines, Restricting The Distance Which Firewood May Be Moved From Where The Trees Were Cut Down. Please Do Not Transport Firewood To Campsites Away From Your Home, And Be Aware Of The Source Locations When Purchasing Firewood For Home Use.



Fig. 1. – A carpenter ant worker.
(Photograph Clemson University,
Cooperative Extension Slide
Series, www.bugwood.org)

Do the insects cause any damage to the firewood? We do not feel there is any real damage associated with insects in firewood. If the seasoning (drying) operation is done properly the wood will dry before the insects complete development, and they will not survive. Although one may observe small piles of sawdust on or near the woodpile, which indicate insect activity, most of the woods used for fuel in the northeast are hardwoods, and little real damage occurs.

Will firewood insects attack wood in the house? For the most part insects are only nuisance pests in the house. However, if the house has the correct conditions for an insect infestation, firewood could be the source of damaging insects. One example might be [carpenter ants](#) (Fig. 1). If one brings in wood infested with carpenter ants, and stores it in a basement or garage containing some wet structural wood, perhaps already starting to decay, carpenter ants might move into it as the logs dry out and establish a nest. This is the exceptional case, rather than the rule.

However, while dry structural wood in the home is rarely attacked by firewood insects, be aware that the beetles or wasps that emerge from firewood can, and frequently do, seek out nearby living trees to lay their eggs. This can not only damage the trees, but is one of the ways that invasive insect pests reach new areas, whenever firewood is transported between regions.

Should I spray logs to prevent insect pests? We do not recommend spraying firewood for any reason. Proper cutting and storage can reduce insect pests.

What insects attack firewood (or any type of wood)? There are four main groups of insects that can damage wood (see above). They are bark beetles, ambrosia beetles, woodborers, and wood wasps (horntails). Bark beetles burrow between the bark and sapwood. Ambrosia beetles bore through the bark and into the sapwood and/or heartwood, while woodborers can be found either between the wood and bark, or in the heartwood or sapwood. Wood wasps (horntails) bore into the sapwood and heartwood of living trees, and can be found in cut firewood.

When are insects active? Most insect activity occurs during the growing season in New York State from April to October. During this time adult beetles are actively looking for favorable woods on which to lay their eggs. From November to March insects hibernate and few, if any, adults are present.

Bark beetles and ambrosia beetles are active during the entire growing season and may have five or more generations during this time depending on the climate. With the woodborers, activities are more restricted often to a certain few weeks of adult



Roundheaded apple tree borer
(James Solomon, USDA Forest
Service, www.Bugwood.org)

activity. In order to determine the periods of activity, you will have to know what types of wood you will be cutting and then learn the activity cycles of the various insect pests.



Bark beetle (Photograph J. R. Baker & S. B. Bambara, North Carolina State University, www.bugwood.org)



Ambrosia beetle. (Photograph J. R. Baker & S. B. Bambara, North Carolina State University, www.bugwood.org)



Sugar maple borer. (Photograph Doug Allen, SUNY, www.bugwood.org)



Flatheaded appletree borer (James Solomon, USDA Forest Service, www.Bugwood.org)

What can I do to avoid large numbers of insects? Cutting firewood at the right time of the year (during the dormant season) will help avoid some pests. Pile the logs soon after they are cut, either off the ground or under cover so that the inner bark dries rapidly and thoroughly before the beetles begin to fly in the spring. If logs are cut during the growing season, remove them from the forest as soon as possible. Even a few days exposure when insects are active may be enough time for an infestation to begin.

How should I store firewood? Firewood should be stored out of doors, under cover and near the house so that valuable space in the house is not used, but the wood is still nearby. Insects are kept outside this way and the dirt problem is reduced.

Store wood under cover to keep it dry. Storage places might be a woodshed, unheated garage or utility building, or under a sheet of plastic or sheet metal roofing. Be certain to keep an air space between the wood and any covering.

If wood is dried quickly, few insects are likely to survive. The greater the surface area of wood exposed to air, the more rapid the drying. Stacking wood in loose piles raised off the ground as well as splitting or sawing will accelerate drying. This is especially needed with logs greater than eight inches in diameter or longer than four feet.

Firewood placed in an open area will dry rapidly and deterioration will be prevented. Put a cover over the top tier of wood, clear plastic sheeting can be used. Temperatures under the plastic covering will rise higher than outside, warming the wood and evaporating the contained moisture. Water vapor either escapes or is condensed on the plastic; therefore, some arrangement for ventilation is needed.

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