

# WOOD WASPS AND HORNTAILS

## Integrated Pest Management in the Home

The names “wood wasp” and “horntail” describe several kinds of wood-boring insects in the order Hymenoptera, family Siricidae. Of greatest concern are the large, nonstinging wasps that normally are attracted to and complete their life cycles in newly dead or dying conifer trees. Timber salvaged from these trees can be processed into infested lumber. This can lead to adult wasps emerging in recently completed buildings or structures.

Although these insects are extremely annoying, they aren’t harmful to humans or structures. They attack only trees and won’t bore into wood in buildings or furniture. See the Pest Note: *Wood-boring Beetles in the Home* for information on borers that will attack furniture or structures.

### IDENTIFICATION

The dozen species of wood wasps in California, Oregon, and Washington look similar (Fig. 1). They are large insects, generally 1 inch or longer, and wasplike in appearance but have an elongated, cylindrical body without a noticeable constriction or “waist.” They often are black or metallic dark blue or combinations of black, red, and yellow. They make a noisy buzz when flying.

The male and female have a similar body shape, except the female is larger and has a long egg-laying apparatus (ovipositor) that can exceed her body length. The female can use her ovipositor only for egg laying; she can’t use it to sting in defense. Although these pests can chew through wood, they don’t bite people.

### LIFE CYCLE

A female wood wasp drills her ovipositor nearly  $\frac{3}{4}$  inch into the wood of a weak-

ened or dying tree and lays 1 to 7 eggs. At the same time, she squirts in a fungus from her abdominal gland. She continues this process, laying up to 200 eggs.

Eggs hatch in 3 to 4 weeks, and larvae tunnel into the fungus-predigested wood parallel with the grain. Larvae are legless, cylindrical, whitish, and have a spine at the tip of their last abdominal segment (Fig. 2). As they chew, larvae use a spine at the tip of their abdomen to help push themselves forward, through the wood. Larvae begin eating the softer wood (sapwood) just beneath the bark, following the fungus into the heartwood, then return to the sapwood to complete their feeding.

Larval feeding continues through 5 or more immature stages, which take at least a year and as many as 5 years in cooler climates to complete. The tunnel, or gallery, usually measures 10 to 12 inches long at completion.

Pupation takes place at the end of the gallery. After 5 or 6 weeks as a pupa, the adult emerges by chewing through about  $\frac{3}{4}$  inch of wood, leaving a round exit hole  $\frac{1}{4}$  to  $\frac{1}{2}$  inch in diameter.

### DAMAGE

Wood wasp damage in buildings is more cosmetic than structurally weakening. The total number of insects emerging in any one house is limited, usually fewer than a dozen. Emerging wood wasps can chew through just about any substance, and you can see their large exit holes in wallboard or plaster walls, hardwood floors, linoleum, carpeting, nonceramic floor tiles, and other interior surfaces.

Wood wasps don’t reinfest structures. Even if male and female wood wasps



Figure 1. Adult wood wasp, *Sirex californicus*, female.

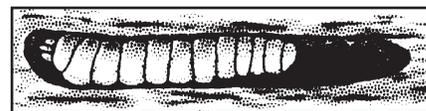


Figure 2. Western horntail wasp, *Sirex areolatus*, larva.

had the opportunity to mate in the building, the females would not be stimulated to lay eggs in dry, finished lumber.

### MANAGEMENT

Wood wasps are likely to occur anywhere infested timber is used for construction. Even though salvaged timber is adequate for restricted, lower-grade construction purposes such as studs and subflooring, it isn’t valuable enough to warrant kiln drying. Kiln drying or vacuum fumigation of lumber is the only effective way to kill wood wasp larvae that have survived milling operations, but treatment is costly. Fumigation of milled lumber in boxcars, under tarpaulins, and in standing buildings hasn’t been successful.

Even though wood wasps can be a noisy, and sometimes scary, nuisance, they aren’t a threat to anyone or anything. Waiting out the life cycle and repairing cosmetic damage is about all that can be done in an infested building.

## PEST NOTES

Publication 7407

University of California  
Statewide Integrated Pest Management Program  
Agriculture and Natural Resources

April 2010

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**ILLUSTRATIONS:** Fig. 1, N. M. Schiff, U.S. Forest Service; and Fig. 2, Adapted from Swan, L. A., and C. A. Papp. 1971. *The Common Insects of North America*. New York: Harper and Row.

University of California scientists and other qualified professionals have anonymously peer reviewed this publication for technical accuracy. The ANR Associate Editor for Urban Pest Management managed this review process.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.

This material is partially based upon work supported by the Extension Service, U.S. Department of Agriculture, under special project Section 3(d), Integrated Pest Management.

Produced by **UC Statewide Integrated Pest Management Program**  
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Agriculture and Natural Resources Program**

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Pesticides applied in your home and landscape can move and contaminate creeks, rivers, and oceans. Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits or vegetables ready to be picked.

Do not place containers containing pesticide in the trash or pour pesticides down the sink or toilet. Either use the pesticide according to the label, or take unwanted pesticides to a Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Household Hazardous Waste Collection site nearest you. Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

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