



Forest Health Note

Western Tent Caterpillar (*Malacosoma californicum*)

Hosts:

In western Oregon alder, cottonwood, willows, hawthorn, and fruit trees are commonly infested. Hosts in eastern Oregon include aspen, cottonwood, fruit trees, bitterbrush, ceanothus, and gooseberry.

Importance:

Western tent caterpillar is one of the most common pests of hardwoods in Oregon. Outbreaks of this defoliating insect can last 2 to 3 years and cover thousands of acres. The sight of completely and partially defoliated trees and thousands of caterpillars can be alarming, but even large outbreaks do not cause tree mortality (Figure 1). In eastern Oregon outbreaks can kill bitterbrush, an important browse for deer. During heavy infestations, tent caterpillars will migrate and feed on many non-host plants.

Look For:

March - June

Eggs hatch as the new foliage appears in the spring and caterpillars construct and enlarge tents while consuming adjacent



Photo: William Ciesla, FHM Intl, Bugwood

Figure 1: Defoliation by western tent caterpillar with old tents visible in the upper crown.

foliage (Figure 2). Often tree limbs on which tents are constructed are completely defoliated. Larvae are hairy and yellowish-brown, with a broken blue line down their backs (Figure 3).

Biology:

Tent caterpillars have one generation per year. Young larvae feed gregariously, but as they mature in late May or early June, they disperse over the tree and feed singly. Tent caterpillars are not present between late June and mid-March of the following year.

Control:

Natural

Biological If nothing is done, tent caterpillar populations collapse in 2-3 years from the combined effects of parasites and disease (Figure 4). In most forest situations control with insecticide is not warranted.

Cultural

Prune off and destroy caterpillars and tents as soon as the infestation is apparent. Early morning and evenings are the best times to prune out



Photo: Whitney Cranshaw, CSU, Bugwood

Figure 2: Caterpillars construct a large, silken tent, which can be over 12" in length and often webs together adjacent branches.

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Photo: Whitney Cranshaw, CSU, Bugwood



Figure 3: Mature western tent caterpillars are 2" long and feed singly. Larvae are hairy, yellowish-brown, and have a broken blue stripe on the back.

Photo: Steven Katovich, USDA FS, Bugwood



Figure 4: Larvae infected with nucleopolyhedrosis virus hang in an inverted v-shape, signaling the collapse of the outbreak.

tents since the caterpillars tend to congregate in their nests at night.

Insecticides

Spraying of tent caterpillar infestations is rarely warranted. Insecticides can be used most effectively against small larvae in the early spring and should be applied to tents and surrounding foliage in the early morning or evening. The following formulations are registered for tent caterpillar control on ornamental trees:

- *Bacillus thuringiensis*
- cyfluthrin
- spinosad
- tebufenozide

Remember, when using pesticides, always read and follow the label.

For further information about the Oregon Department of Forestry's Forest Health Program,

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