

PHOTO COURTESY OF OSU EXTENSION SERVICES Fall webworm feed on almost all fruit, forest and shade trees, except conifers.



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ask a master gardener FALL WEBWORMS



Chris Rusch Master Gardener

UESTION: I have noticed some large cobwebs on the branches of deciduous trees in my neighborhood. What is this? Will it harm the trees?

NSWER: The silken caterpillar nests that look like cobwebs have begun to appear in deciduous trees throughout Oregon. The gauzy-looking tents at the end of tree branches are fall webworm caterpillars.

These caterpillars are the larvae of a native species of tiger moth known to entomologists as Hyphantria cunea. They are considered to be a pest by many people but are primarily a cosmetic nuisance.

Fall webworms are native to North America and appear abundantly across the USA and southern Canada. The caterpillars feed on more than 85 species of deciduous trees and shrubs in the United States and are common ly seen in black walnut trees, willows, fruit trees, Pacific madrone and cottonwoods in Oregon. The fall webworm feeds on almost all fruit, forest and shade trees, except conifers.

Fall webworm nests are composed of silky threads wrapped around the leaves and branches of trees encapsulating the caterpillars. The nests are loosely constructed and messy looking, occurring at the branch tips, and enlarging as food runs out. Large colonies can encapsulate an entire tree in their webbing. The caterpillars feed inside the nest and as such, the nest is full of frass and dead plant material.

Fall webworm caterpillars can range in color from brownish-grey, yellowish, green or all black. The webworms in the northern range tend to have black heads while the ones in the southern range have red heads. Both have brown/black, wortlike spots running down the length of their body, with a tuft of long hairs coming out them. They range in length from 1-1.5 inches.

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generation in the Pacific Northwest. The adult moth is satiny white, with long, soft hair, and may have brown or black spots on the wings. It measures 1 to 1-1/4 inches across with the wings expanded. It overwinters as a pupa in a coccon under debris on the ground, in bark crevices or in the soil. Adults emerge in summer and females deposit eggs on leaves in masses of 300 to 400. Eggs hatch in about 10 days.

The young larvae live as a colony within balloon-like webs, which contain leaves on which they feed. The webs expand as the larvae grow and can measure up to 2 feet long.

When almost full grown, caterpillars often feed outside the web at night. The larvae eat foliage and fruit within their webs. As food becomes scarce on a branch, caterpillars may migrate to another branch or tree. Larvae mature in the fall then enter the soil to pupate where they remain until next June.

Fall webworms rarely cause significant damage but are considered unsightly. Deciduous tree species can recover from substantial defoliation, particularly if impacted late in the season when most growth has already occurred. Typically, impacts to plant health cannot be observed until defoliation involves more than 20% of the foliage.

Fall webworm populations are usually not maintained at high levels for consecutive years, although local outbreaks can be relatively common.

Control methods include both mechanical and biological. On small trees and reachable branches, nests can be cut out and destroyed. Infestations need to be removed as soon as you see the web, and before the caterpillars mature to their instar stage when they move outside the web. Submerge the plucked tents and worms in soapy water or a garbage bag.

Biological controls include Bacillus thuringiensis kurstaki, better known as Btk which is a biological insecticide effective against webworms and many other caterpillars. You will need to tear open the silk nest to get the spray on the caterpillars. You can also try to spray the leaves just outside the existing tent so when the caterpillars expand their tent they will feed on the treated leaves and die.

Another biological control is Parasitoids. There are many naturally-occurring species that lay their eggs in the caterpillars, eventually killing them.

Fall webworms are sometimes mistaken for tent caterpillars, but tent caterpillars appear in spring, whereas fall webworms appear in late summer through fall. The tents of the fall webworms are loosely constructed and messy looking and appear at the ends of the branches, whereas the tents of the tent caterpillars are more tightly constructed, neat looking and appear in the crotches of branches.

If there was a contest for the ugliest pest infestations on trees and shrubs, fall webworms would likely take the prize.

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@ oregonstate.edu or 541-672-4461 or visit 1134 S E Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service serve the people of Douglas County.