# The Tents Are Coming – No Cause for Alarm

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**Caterpillars signify new, rejuvenating life**

Perhaps it is our fatigue, our tiredness of the darkness of winter. Or maybe it's our eagerness to see the lush new green of spring bursting forth that fuels our disappointment (yes, and anger) over the appearance of tents in our trees. Disappointment is okay, but is the anger justified?

Wait! Those tents signify another type of life bursting forth! One that will replenish soil that has been over-watered and feed many species who have hungered during the winter. It is the under appreciated western tent caterpillar, *Malacosoma californicum*. There is also a forest tent caterpillar that is less common, *Malacosoma disstria*. (The first is our most common tent maker. Others are called webworms or tussock moths.)

Their egg cases were deposited on deciduous trees and shrubs in the late summer and early fall. The hatching caterpillars spin a silken web to gain some protection from predators and weather. At first, they feed inside the tent and enlarge it as they grow. Since these caterpillars feed in early spring, turning young leaves into compost that rains down to replenish soil, the tree has time to replace those leaves after the caterpillars are gone. Often you see tents in trees later that fail to develop. This is probably due to weather or other factors like disease or fungus.

As they grow, the caterpillars eventually leave the tent and wander about searching for more leaves and a place to spin a cocoon and undergo complete metamorphosis. It is at this time that they are more easily preyed upon by other insects, spiders, small mammals and birds. Even their cocoons can be food for other species, and once they have emerged as moths to mate, they are more easily consumed by birds and bats. They are also prey to virus, disease and fungi.

People frequently wonder about the "cycle" of tent caterpillars, mentioning a seven-year cycle. The cycle is more arbitrary, depending upon factors such as weather and prey species. In years with a big outbreak of caterpillars, their predators are more successful. So the following year if there is another big outbreak, there are more predators and gradually the caterpillar numbers fall. As the "prey" species diminish in numbers, so do predator numbers.

Now, if you are in business and your livelihood depends upon fruit production or tree production, then action is necessary as energy is spent on producing more leaves. Also, the tents can interfere with setting of fruit. Our orchardists take action in the winter to remove the egg cases either by peeling them off or by pruning. The egg cases can be dropped on the ground, which makes them available to predators and allows any natural enemies whose eggs have been deposited in the egg case to exit!

Hundreds of tent caterpillars eat away at the leaves of an apple tree in spring 2014. Caterpillars are voracious eaters and can defoliate entire trees if left unchecked. However, as they feed in early spring, the caterpillars turn young leaves into compost that rains down to replenish soil, and most trees have time to regrow leaves after the caterpillars are gone. Aggressive defoliation in an orchard, though, can be devastating in terms of growth and crop yield. *Photo from Skagit Valley Herald file.*

If you have a small, just planted tree, you may want to do the same as the orchardist since unestablished trees are more vulnerable to stresses. Or, an ornamental by your front door would be aesthetically displeasing with tents, and you might want to take action. If you've missed the egg cases, the web with caterpillars inside can be pulled off or pinched when cool or in the evening if pruning would distort your desired shape. These mechanical methods of removal are more environmentally friendly and do not result in chemicals running off and eventually reaching Puget Sound.

Larger trees will put out new leaves and should be less vulnerable to attack the following year as they seem to develop some resistance. Weakened trees are partially killed only when severe infestations (total defoliation) are combined with drought or other stressors (like disease). This is one aid in a forest when trees are too overcrowded for nutrients and moisture and is a form of natural thinning.


**Left:** These tent caterpillars have fly eggs on their heads. When the eggs hatch, the fly larvae will consume the caterpillar from the inside, then pupate as flies. *Photo by Virgene Link / WSU Skagit County Master Gardeners.* **Right:** A tent caterpillar feeds on an alder tree in Mount Vernon last spring. *Photo from Skagit Valley Herald file.*

Our native trees have evolved with our native insects, and thus have a symbiotic relationship that benefits an entire food web. Particularly, the tent caterpillar seeks out red alder in the native forest. Other host plants are those in the rose, birch and willow families as well as others.

Later in the year, we hardly note the trees that hosted tent caterpillars, as we've forgotten which trees were defoliated in the abundance of new leaves. Please be tolerant of some damage because this species plays an important role in the ecosystem.

**RESOURCES:**


- *Insects of Skagit County*. Lloyd Eighme.
- "Tent Caterpillars." *Home Garden Series*. Sharon Collman, Art Antonelli and T. A. Murray. Washington State University.
- *Bringing Nature Home*. Douglas Tallamy. University of Delaware.