

Tent caterpillars



Fall webworm



Tent-Making Caterpillars of Colorado

Uglynest caterpillar



Silverspotted tiger moth



Tent-Making Caterpillars

Fact Sheet No. 5.583

Insect Series | **Trees and Shrubs**

by W.S. Cranshaw*

Several kinds of caterpillars feed in groups or colonies on trees and shrubs and produce a silken shelter or tent. Most common in spring are various types of tent caterpillars (*Malacosoma* species). During summer, large loose tents produced by the fall webworm (*Hyphantria cunea*) are seen on the branches of cottonwoods, chokecherry, and many other plants. Occasionally early spring outbreaks of caterpillars of the tiger moth (*Lophocampa* species) attract attention.

Tent Caterpillars

Four species of tent caterpillars occur in Colorado. The western tent caterpillar (*M. californicum*) most often is seen infesting aspen and mountain-mahogany during May and early June. Many other plants, particularly fruit trees may also be infested. Western tent caterpillar is the most common and damaging tent caterpillar, sometimes producing widespread outbreaks that have

skins) while on the silk mats. Most often the caterpillars leave the silk shelter to feed at night, returning by daylight, although they sometimes feed during daylight hours as well. The tent is gradually enlarged as the caterpillars grow.



Figure 1: Egg mass of western tent caterpillar.



Quick Facts

- Several species of caterpillars construct a silken shelter or tent.
- In spring, tent caterpillars are common. After midsummer, the most common tent-making caterpillar is the fall webworm.
- These insects attract attention due to the conspicuous tents. However, they rarely cause any significant injury. Greatest injury occurs from early season defoliation, particularly on stressed plants.
- Many biological controls naturally regulate populations

Tent Caterpillars (*Malacosoma* species) of Colorado

- **Western tent caterpillar**
- **Eastern tent caterpillar**
- **Southwestern tent caterpillar**
- **Sonoran tent caterpillar**
- **Forest tent caterpillar**



Western tent caterpillar



Eastern tent caterpillar

Tent Caterpillars (*Malacosoma* species)



Sonora tent caterpillar




Southwestern tent caterpillar

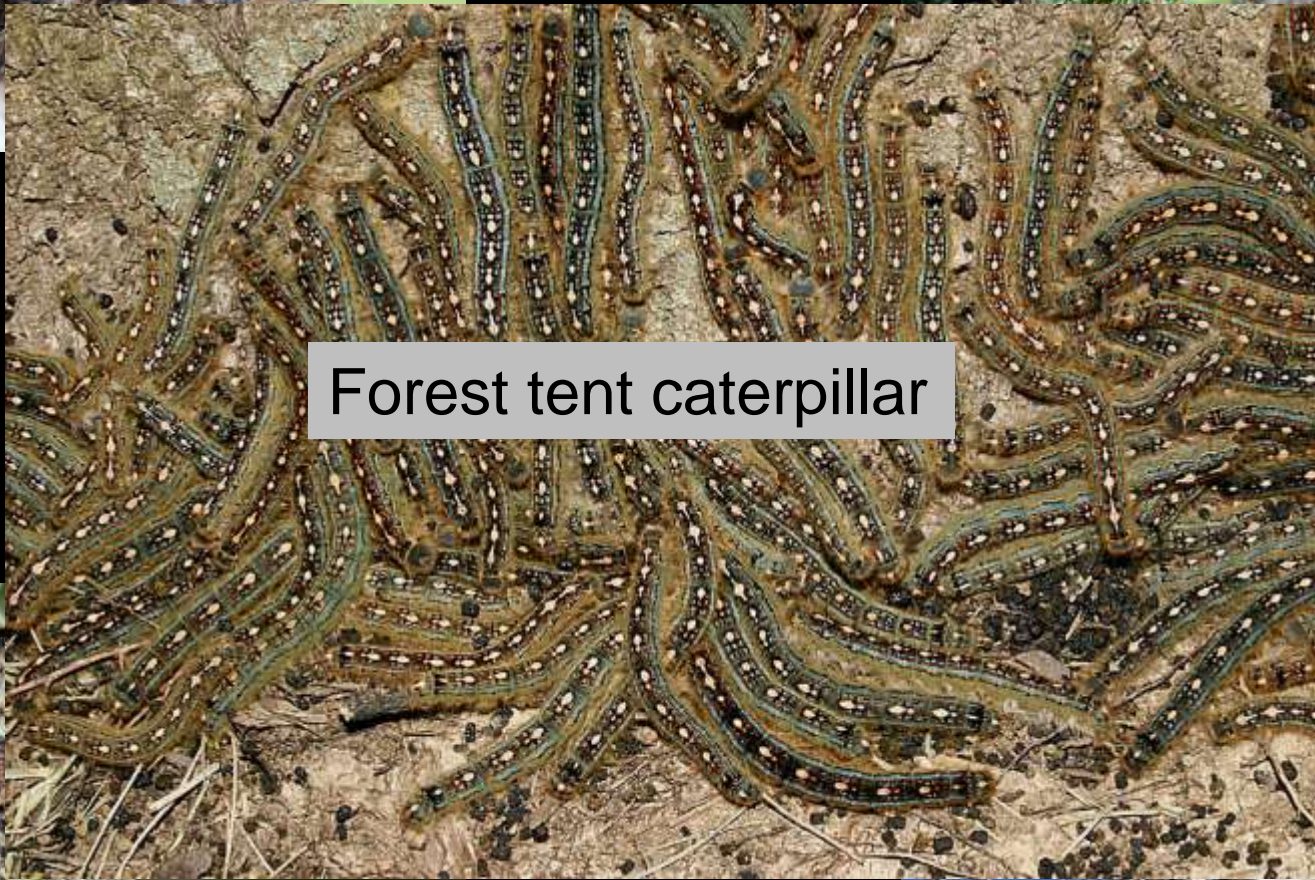
Tent Caterpillars (*Malacosoma* species)



Western tent caterpillar




Eastern tent caterpillar



Forest tent caterpillar



Sonora tent caterpillar



Southwestern tent caterpillar



Egg mass



Late stage larvae

Western Tent Caterpillar (*Malacosoma californicum*)



Mating pair of adults



Pupa (within cocoon)



Tent caterpillars spend winter in the egg stage, within an egg mass on twigs. Egg hatch occurs in spring.



Collectively, the caterpillars create a silken tent, often in the crotch of branches.



The caterpillars usually rest on or in the tent during the day, and feed at night





Tent caterpillar activity occurs early in the season, beginning shortly after new leaves are produced.

This infestation of southwestern tent caterpillar, south of Grand Junction, was photographed on May 5.





After feeding the full-grown caterpillars wander a bit then settle and pupate, within a cocoon



Southwestern tent caterpillar cocoons underneath a bridge



Adults usually emerge in June or early July. After mating females lay their egg masses on twigs.

Forest Tent Caterpillar

A tent caterpillar that does not make a permanent tent!





Tent Caterpillars have an enormous number of natural enemies

**Outbreaks rarely last more than
two years due to the effects of
these natural controls**



**Outbreaks of the NPV
“Wilt disease” are
devastating to tent
caterpillars**



Photographs courtesy of Dan West, Colorado State Forest Service

Fall Webworm

Hyphantria cunea



Often the most commonly noticed of the tent making caterpillars





Fall webworm winters in the pupal stage.

Adults emerge in late spring and lay eggs on foliage.





**Fall webworm winters
in the pupal form.
Adults emerge in late
spring and lay eggs on
foliage.**





Fall webworm egg mass



Early stage larvae



Early stage larvae





As they develop the larvae construct a tent of loose webbing that covers the foliage on which they feed.







**The old tents very
visibly persist through
winter**



Fall Webworm has an enormous number of natural enemies

Outbreaks rarely last more than two years due to the effects of these natural controls



Comparison of **Tent Caterpillar** vs. **Fall Webworm**



**Damage occurs
in spring**



**Damage occurs in
summer**

Comparison of **Tent Caterpillar** vs. **Fall Webworm**



**Larvae construct a
dense tent in branch
crotches**



**Larvae construct a
loose tent over foliage**

Numerous natural enemies **attack both tent caterpillars and fall webworm in Colorado**





Tent caterpillars
and fall webworm
are heavily
parasitized by
parasitoid wasps

Photograph by **David Shetlar**, The University of Ohio



Photograph by **Gerald
Lenhard**, BugWood.org



Photograph courtesy of David Shetlar

Tachinid Flies



Photographs courtesy Ken Gray Collection,
Oregon State University



A virus that produces the “wilt disease” can be an important regulator of tent caterpillar outbreaks

Once you see this disease – tent caterpillars will be gone as a problem for years



Photograph by Steven Katovich