

Forest tent caterpillar

Malacosoma disstria Order Lepidoptera, Family Lasiocampidae; tent caterpillars and lappet moths Native pest

Host plants: Alder, aspen, ash, basswood, birch, cherry, elm, hawthorn, maple, oak, peach, poplar, willow and flowering fruit trees

Description: Adult moths are buff-colored with two darker oblique bands on the forewings. Wingspan is 25–38 mm; adults are approximately 18 mm long with wings folded. Mature larvae are approximately 50 mm long, blue and gray with oval white spots along the back.

Life history: Young larvae hatch when leaves are beginning to unfold in mid- to late May. Colonies of larvae stay together and move about in single file. They do not make silken tents. Cocoons are constructed within folded leaves or bark cracks. In mid summer, eggs are deposited in black masses, which encircle twigs. There is one generation a year.

Overwintering: Black egg masses on twigs.

Damage symptoms: Young larvae cause shothole damage to foliage. Mature larvae can defoliate forest and shade trees, reducing their growth and vitality, but rarely causing tree death.

Monitoring: Look for shot holes in foliage from mid to late May when larvae begin to be active. Feeding is complete by the end of June. It is important to detect serious infestations early to prevent defoliation.

Physical control: Where possible, egg masses can be cut from trees and destroyed. Small populations of larvae can also be physically removed.

Chemical control: *Bacillus thuringiensis* var. *kurstaki* can be sprayed to control young larvae. Larger populations of older larvae can be controlled with a residual insecticide.

Biological control: The large gray parasitic fly, *Sarcophaga aldrichi*, often becomes very abundant during forest tent caterpillar outbreaks. Known as the friendly fly, this native parasite lands on any object, including people. This insect is very important for naturally reducing forest tent caterpillar outbreaks. *Hyposoter* spp. (Ichneumonidae) and *Bracon* spp. (Braconidae) are also parasitoids of forest tent larvae. An NPV virus and a fungal pathogen, *Entomophthora*, also can occur in outbreak populations.

Plant mortality risk: Low

Biorational pesticides: *Bacillus thuringiensis* var. *kurstaki*, diflubenzuron, insecticidal soap, pyrethrins, spinosad, tenbufenozide

Conventional pesticides: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), cyfluthrin, deltamethrin, fluvalinate, lambda-cyhalothrin, malathion, permethrin



Forest tent caterpillar adult male. (126) Photo: Oregon State University Extension Service



Forest tent caterpillar larvae resting in mass on trunk (lighter individuals have recently molted). (W55)
Photo: Whitney Cranshaw



Forest tent caterpillar larvae on pin oak. (127) Photo: John Davidson

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Forest tent caterpillar (continued)



Forest tent caterpillar larva (top), and Eastern tent caterpillar larva (bottom); note the keyhole on the forest tent caterpillar larva and the stripe on the Eastern tent caterpillar larva. (204) Photo: David Laughlin



Forest tent caterpillar egg mass with recently hatched larva. (258) Photo: Whitney Cranshaw



Forest tent caterpillar pupa. (W56) Photo: Whitney Cranshaw



Forest tent caterpillar egg mass on oak. (129) Photo: John Davidson

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