

# FPL 11 – Fall Webworm

The information accessed from this screen is based on the publication: Humphreys, N. 1983. Fall Webworm. Forestry Canada, Forest Insect and Disease Survey, Forest Pest Leaflet No. 11 4p.

## Introduction

The fall webworm, *Hyphantria cunea* Drury (Lepidoptera: Arctiidae), is native to North America and is a major pest of trees in Europe and Asia. The webworm feeds on a wide variety of deciduous trees and shrubs, often resulting in complete defoliation. The extensive tents or webs, for which the insect is named, may be numerous on one or more trees at a locality ([Fig](#)). Control is seldom necessary because the damage is generally of aesthetic rather than economic importance.

## Distribution

The range of the fall webworm in North America extends across the continent from southern Canada to northern Mexico. In British Columbia, it is common throughout the southern portion of the province, particularly in the Kamloops Region.

## Hosts

About 120 species of deciduous trees and shrubs are attacked, including birch, willow, western chokecherry, and cottonwood. Fruit and nut trees are also common hosts ([Fig](#)).

## Description

There are two races of a single species—one blackheaded and one redheaded. The blackheaded dominates in the northern portion of the range and the redheaded in the southern portion.

Egg: Spherical, 0.75 mm, white or yellow, changing to dull grey. Laid in masses on the underside of leaves, frequently covered by white wing scales.

Larva: Up to 35 mm long. Early stage slender, pale yellow with 2 rows of black marks along the body, and sparse hair; mature caterpillar is grey, thickly covered with erect yellow-orange hairs on black and orange tubercles. Head shiny black or red ([Fig](#)).

Pupa: Dark brown, 12 to 15 mm long by 5 to 6 mm thick; in thin, translucent ovoid cocoon woven of silk and body hairs. Found in bark crevices, under stones, or in soil cover.

Adult: Wingspan 25 to 40 mm. Wings are white, sometimes marked with small black spots. Body with soft white hair, yellowish beneath; two rows of dark spots on back. Antennae are

black and white.

### **Life History and Habits**

Eggs are laid on the undersides of leaves in masses of up to 300. The eggs hatch after about two weeks.

The larvae may first be seen in July and are most abundant in August. Groups of emerging larvae at once spin a feeding shelter and extend it to include more foliage as needed.

The larvae mature in the autumn after feeding for 4 to 6 weeks and their tents cover branches or even whole trees ([Fig](#)). The larvae then leave the webs to seek sheltered spots in bark crevices, beneath stones, or in ground litter for pupation. Pupae overwinter and moths emerge in late June to early July.

The white moths are somewhat similar to the satin moth, *Leucoma salicis* (Linnaeus), but adults of that species are larger in wingspan (up to 50 mm), are glistening white, and appear later in the summer.

### **Damage**

The larvae are gregarious defoliators which share and continually expand the web under which they shelter. In severe infestations, larvae may defoliate entire trees ([Fig](#)). Young larvae feed upon the upper and lower leaf surfaces, leaving the veins. Larger larvae will consume the whole leaf.

### **Control**

Despite a lengthy history as an enemy of fruit and shade trees, *Hyphantria cunea* has not caused infestations serious enough to warrant chemical control on a large scale. A perennial form of natural control is the high incidence of insect parasitism by more than a dozen species of flies and wasps. Predators such as beetles and stink bugs attack eggs and caterpillars, and disease may also be an important part of control.

Direct control is advisable only when fruit trees and ornamentals are involved. Branches bearing webs should be cut off and the colonies burned. Insecticides registered for use against leaf-chewing insects should be effective if sprayed on the feeding areas, particularly if applied about the time the young caterpillars are spinning tents in early summer.

---

# Figures



Figure 239-0018. Numerous colonies of fall webworm.



Figure 239-0019. Severe defoliation of cherry by fall webworm.



Figure 239-0021. Larvae of fall webworm.



Figure 239-0018. Numerous colonies of fall webworm.

---

Figure 239-0020. Severe defoliation of cherry by fall webworm.

