

Fall Webworm

By Master Gardener Teresa Casey

Description

The Fall Webworm (*Hyphantria cunea*) is a moth species belonging to the family *Erebidae* (falling under the insect order classification of *Lepidoptera*). Native to North America, this insect is widely distributed throughout the eastern and southeastern regions of the United States. The fall webworm is like the eastern tent caterpillar in that it creates conspicuous silk tents in trees but differs in that it always places the tent at the end of the branch. The fall webworm feeds within the nest so the webbing contains fecal droppings (eastern tent caterpillar makes its tent in branch crotches and comes out to feed). The fall webworm also is most noticeable in mid-summer into fall, whereas eastern tent caterpillar occurs only in spring. The fall webworm caterpillars provide a food source for a variety of predators, including birds, wasps, and other insects.

Damage

Webworm caterpillars are communal and begin building their characteristic silken webs over the course of several weeks. These webs serve as protective shelters where the caterpillars feed, grow, and molt several times. They rarely cause significant harm to well-established trees. However, heavy infestations can lead to defoliation, which may weaken trees and make them susceptible to other stressors.

Biology

The fall webworm undergoes four distinct life stages: egg, larva (caterpillar), pupa, and adult. The life cycle typically begins in early spring when adult moths emerge from their overwintering pupae. The adult moths are satin white with or without brown wing spots. After mating, the female moth lays clusters of small, pale-yellow eggs on the undersides of leaves. Females deposit eggs in hair-covered masses of 200-500 on the



Fall Webworm *hyphantria cunea* webs in tree.
Credit: **Dr. Tim Davis Director CGBG**

underside of leaves. Within a week, the eggs hatch and immediately spin a web in which they live in groups. Caterpillars feed on leaves encased in their light grey webs, enlarging their webs to enclose more foliage as they grow, until the last instar when they leave the web and feed individually. The caterpillars eventually grow to about one inch long.

Control Methods

The Fall Webworm is targeted by several natural predators and parasitoids including birds, parasitoid wasps, tachinid flies and fungi that help regulate its population in the ecosystem. These natural enemies play a crucial role in maintaining a balanced ecosystem by controlling the population of the fall webworm and preventing excessive damage to trees caused by their feeding activities. It is essential to preserve these natural



Second instar larvae of *Hyphantria cunea*.

Credit: [Ministry of Agriculture and Regional Development](#)

feeding activities. It is essential to preserve these natural predators and avoid using broad-spectrum pesticides that could harm beneficial insects along with pests. Pruning infested branches or manually removing the webs can be effective for small-scale infestations. For more extensive infestations, biological insecticides based on *Bacillus thuringiensis* (Bt) can also be used as a targeted and safe method to manage the caterpillars without harming other beneficial insects.