

# What a tangled web they weave...

by Irene Sabin, '94

## Fall Webworms

Fall Webworms, *Hyphantria cunea*, are native to our area and feed on many (100+) shade trees and shrubs. They are in the tiger moth family. Their silk tents appear in late summer and early fall. Adult moths emerge from cocoons in mid-summer and lay a large number of small eggs on leaves which they cover with hair. The eggs hatch in about one week and the larvae start forming silk nests around the area where they are eating. The tents are started at the ends of branches and grow in size as the colonies consume leaves and need to encase more foliage.

Young larvae eat the upper surface of leaves but older instars can skeletonize entire leaves. Caterpillars, shed skin from molting, parts of eaten leaves and frass can be observed inside the tents which are used as protection from predators and parasites. Larvae mature in 6 weeks, after about 10 molts, and leave the nest to pupate over the winter in mulch, leaves or loose soil. Caterpillars are one inch long with black or red heads and light-colored bodies with black or red spots from which long white or grey hairs grow. Moths are white with a wing span of one to two inches.. There is usually one generation of fall webworms in our area but warmer areas may see two to four generations.

The webs are unsightly, but after defoliation trees usually recover their leaves. Branches with webs can be pruned out and the caterpillars destroyed manually. However, pruning may disfigure an ornamental tree. Another option is to break apart the webs so that predators can attack the caterpillars.

## Eastern Tent Caterpillars,

*Malacosoma americanum*, overwinter in egg masses (about 100 to 400 eggs each) wrapped around tree twigs and protected with a hard, varnish-like substance called spumaline. This substance serves as the first meal after eggs hatch. The emerging larvae start to

spin silken tents at the forks of branches in spring, usually at the first flush of new leaves. They actively feed and molt into six larval instars through the middle of June. When fully grown (about 2 inches), they look for places to pupate. They spin a silken, yellowish cocoon in trees or other vegetation, as well as on structures such as fences or houses. They emerge in about three weeks as reddish brown moths with 2 diagonal stripes on each wing. The moths mate and lay new egg masses. There is one generation per year. While caterpillars have chewing mouthparts, adults have siphoning mouthparts. Adults usually die shortly after mating, in about 5 days. Eastern tent caterpillar numbers vary from year to year with large outbreaks every several years

The caterpillars are hairy, black with blue spots on each side and a white line on top. They use the tents as protection from predators and to help in the molting process. They are sensitive to light and build the webs toward light. They leave the webs to eat, but will stay in on dreary days. They are social animals and will move together as a mass to ward off birds, stink bugs or other predators. When they return from eating, they produce a pheromone path on a silk thread indicating the direction to good food for the others. Their preferred plant is wild black cherry (*Prunus serotina*) but they will feed on the leaves of any fruit trees, especially apple, and other plants in the Rosaceae family. They may completely defoliate a small ornamental tree but most trees recover. The tents are unsightly and the mature caterpillars are a nuisance when they wander around looking for pupating sites.

**A note of warning.** The Eastern Tent Caterpillar is of concern to people who keep livestock. Because the caterpillars' hairs (setae) can produce a cyanide-like secretion, ingestion of the caterpillars while foraging may cause pregnant mares to abort. There is additional concern for livestock owners because this caterpillars' favorite habitat is the wild cherry tree which is poisonous to grazing animals.

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