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Katherine Dugas
Department of Entomology
The Connecticut Agricultural Experiment Station
123 Huntington Street, P. O. Box 1106
New Haven, CT 06504

Phone: (203) 974-8600

Fax: (203) 974-8502

Email: katherine.dugas@ct.gov

Website: <https://portal.ct.gov/caes>

TENT CATERPILLARS (*Malacosoma* sp.)

Tent caterpillar moths have distinctive social behavior as caterpillars. They cooperatively build silk tent shelters on their host tree's trunks and branches. This provides them with protection from predators while resting. The forest tent caterpillar, *Malacosoma disstria* and the Eastern tent caterpillar, *Malacosoma americana* are the most commonly encountered species in Connecticut (Fig. 1).



Fig 1: Forest tent caterpillar (left) and Eastern tent caterpillar (right).

Description and Life Cycle:

The forest tent caterpillar is dark gray, with lines of pale blue running along its sides. It has a broken line of cream to white markings, usually described as 'diamond,' 'keyhole,' or 'footprint' shaped, running down its back. It is sparsely haired. Its primary hosts are forest hardwoods such as oak, poplar, willow, birch, cherry, basswood and alder. Mature caterpillars reach 2.5 inches in length.

The Eastern tent caterpillar is similar in size and has a mostly dark brown to black body, covered in bristly golden brown hairs. It has a distinctive unbroken cream to white stripe running down its back. It feeds on a wide variety of trees and shrubs but it is most commonly found on Rosaceous plants such as apple, crabapple, and cherry.

Silk tents are built along the crotches or intersections of branches and contain caterpillar frass and leaf fragments. Many of these tents take on the shape of a triangle (Fig. 2). Groups of sheltering caterpillars will often twitch or rear in tandem if disturbed. Both species have an identical life-cycle. Eggs overwinter in gall-like masses attached to twigs of host trees (Fig. 3). These hatch in early spring, usually late March to April. After hatching, the first instar (stage) caterpillars begin collectively weaving a silk

tent. These tents are easily seen before new leaves have expanded. Caterpillars feed on new leaves and then retreat to the tent to rest. The tent is enlarged as the caterpillars mature. Affected trees can have partial to complete defoliation, depending on the number of tents. Most feeding is finished by the end of May, when caterpillars disperse to pupate. Tent caterpillars may become a brief nuisance at this time if large numbers of them climb on nearby structures or move across decks and patios. Adults emerge during early summer, mate, and lay egg masses. The adults of both species are stout cream-colored moths, about 1 inch long. There is one generation per year.



Fig. 2: Eastern tent caterpillar cluster and tent.

Tent caterpillars are often mistaken for the caterpillars of the invasive gypsy moth *Lymantria dispar*. Gypsy moth caterpillars are similar in size to tent caterpillars when mature and are also covered in hairs, but they do not build silk tents, nor are they social. Gypsy moth caterpillars are responsible for widespread defoliation damage to native forest and landscape trees especially when their populations are high. Tent caterpillars

are native to New England and rarely cause extensive damage to trees. Defoliation stress from tent caterpillars is most prevalent in younger landscape trees; mature trees may become stressed if defoliation has occurred for multiple years in a row, frequently due to concurrent gypsy moth damage.



Fig. 3: Egg mass

Control:

Look for egg masses and signs of forming tents on landscape trees in early spring. Prune twigs with egg masses and remove tents early in the season to reduce caterpillar load on host trees. Sweep out tents using a broom and place them into a bucket of soapy water. An application of the organic pesticide Bt (*Bacillus thuringiensis*) to expanding foliage when tents appear will control very young caterpillars. Insecticidal soap and Spinosad can also be used.