



## Eastern Tent Caterpillar

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### Introduction

Eastern tent caterpillar (Lepidoptera: *Malacosoma americanum*) is a native moth found in the eastern half of the U.S. The caterpillar is colorful and covered with long, fine light brown hairs (Fig. 1). It has a solid light-colored stripe running down the center of the back and bordered by thin yellow and brown stripes. In addition, the caterpillar has a row of bold blue and black markings along each side. The caterpillar's head is dark colored. Eastern tent caterpillars are sometimes mistaken for the superficially similar spongy moth (formerly known as gypsy moth) larvae.



Figure 1. Eastern tent caterpillar (David Cappaert, Bugwood.org).

The adult moth has a hairy, stout body with two pale stripes on each of the front wings (Fig. 2). Female moths are redder than the darker brown males.

### Life Cycle

Eastern tent caterpillars overwinter as eggs. The young larvae hatch at or before bud break in March or April. The caterpillars are gregarious and build a silken tent together in a fork of host tree limbs (Figs. 3 & 4). The larvae leave the tent during the day to feed but return to the nest during rainy weather and cool overnight temperatures. They measure 2-2.5" (5-6.4 cm) when full-grown in 4-6 weeks. Mature larvae are often found crawling on the ground as they seek nearby buildings or other protected places to spin their dirty-white, coarse cocoons. Adult

moths emerge in about three weeks, and each mated female lays an egg mass containing several hundred eggs that completely encircle small twigs. Egg masses are a shiny dark brown color often described as "varnished" (Fig. 5). There is one generation per year.



Figure 2. A moth of the eastern tent caterpillar (Mark Dreiling, Bugwood.org).



Figure 3. Eastern tent caterpillar nest (Catherine Herms, Ohio State University, Bugwood.org).

## Habitat

Favored host trees include black cherry, chokecherry, and apple. They also feed on hawthorn, pear, plum, and ornamental flowering fruit trees. The adult moths do not feed.



Figure 4. A close-up of eastern tent caterpillars on their silken nest (William M. Ciesla, Forest Health Management International, Bugwood.org).



Figure 5. Eastern tent caterpillar egg mass (Brian Kunkel, University of Delaware, Bugwood.org).

## Damage

Eastern tent caterpillars build small silken nests (tents) for protection in branch crotches as soon as they hatch (Fig. 1). Larvae defoliate increasingly larger portions of the canopy as they grow in size. They continually enlarge the unsightly tent until it measures a foot (30 cm) or more in length. A tree's canopy may be stripped completely when several tents occur in the same tree. Infested trees are often able to re-leaf in the spring after the initial defoliation and the caterpillars have finished feeding.

## Control

During the fall and winter months, cut off and destroy any egg masses found on twigs. Chemical control against the larvae should be done early in the spring while the larvae are small and actively feeding. However, larvae begin feeding on leaves opening from the bud in early spring, before there is much leaf surface area present to be treated with an insecticide. Spray treatments are not always successful if applied too early before the canopy has flushed out. Most insecticides kill larvae by direct contact; however, any larvae remaining in the tent are protected by their silk shelter. Treat foliage and twigs during the day, when caterpillars are actively foraging outside the tent, using insecticides with residual properties. Residual insecticides will still be effective over a short period of time after spraying, killing any larvae that may have been protected in the nest but then emerged to feed on treated foliage. If treating fruit-bearing trees, use an insecticide labeled for use on fruit trees. Burning out tents with fire is not recommended as this is likely to damage the tree.

Consider leaving eastern tent caterpillars alone if found in unimportant trees in the landscape. Many species of birds feed eastern tent caterpillars to their nestlings in early spring. Many trees can re-leaf without harm later in the spring after the tent caterpillars have finished feeding.

## Revised

Theresa A. Dellinger, 2020 and 21 July 2025.

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