



Eastern Tent Caterpillar

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Tim Tigner, Virginia Department of Forestry, Bugwood.org

Malacosoma americanum
(Fabricius)

The eastern tent caterpillar has been observed in the United States since 1646. Outbreaks frequently occur at eight to ten year intervals. The presence of this pest in the spring is usually recognized by their conspicuous nests or tents constructed in the forks and crotches of a tree. Before gypsy moth

outbreaks in the 1970s, some experts considered this pest to be a significant defoliator of deciduous shade trees in the northeastern United States.

Description



Image 1 - Eastern Tent Caterpillar - *Malacosoma americanum* (Fabricius). Eastern tent caterpillar: egg mass. R.L. Anderson - USDA Forest Service; UGA0590063b



Image 2 - Eastern Tent Caterpillar - *Malacosoma americanum* (Fabricius). Eastern tent caterpillar: larvae. G.J. Lenhard - Louisiana State University; UGA0795040b

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The egg mass (Image 1) of this species encircles small twigs and appears to be varnished. The egg mass may be nineteen millimeters. Small larvae spin fine strands of silk wherever they crawl. As the larvae grow, so does the size of the tent. Fully grown larvae are about two inches long, generally black with a white stripe down the middle of the back. Mature caterpillars (Image 2) will leave the host tree to search for a suitable place to spin their pale yellowish cocoons. During late June and July the reddish-brown adult moths (Image 3) with two oblique, white bands on the forewing emerge from their cocoons. After mating, the female deposits eggs in a mass around small twigs on a host plant.



Image 3 - Adult Eastern Tent Caterpillar

Life History

This key pest overwinters as a dark, glistening, collar-like egg mass on twigs. Each egg mass contains 150 to 350 eggs. After hatching from eggs in the spring, about the time cherry leaves issue from buds, the gregarious larvae start to construct their tents in nearby branch crotches. These tents are made of silken layers and serve as protective sites for larvae. The caterpillars feed for a period of six to eight weeks. The mature caterpillars have a habit of migrating to protected areas to spin their cocoons. Within the cocoon the larva transforms into a resting stage called the pupa. The pupal stage lasts about three weeks. During late June and July adults emerge and the female deposits eggs in a mass around small twigs. There is only one generation a year in Pennsylvania.

Damage

The preferred hosts of this pest are cherry, crabapple, and apple. The eastern tent caterpillar occasionally attacks other deciduous ornamental shrubs, shade, and forest trees. The silky tents spun by the caterpillars make landscape trees unsightly, and the caterpillars are annoying when searching for food or a suitable place to spin their cocoons.

The caterpillars do not feed within their webs, but congregate there during the night and rainy weather. When caterpillars are abundant, they frequently eat all the leaves on a tree which weakens it, but seldom kills it. The foliage on the host tree may be stripped from all the twigs within a distance of three feet from the nest(s).

Management

(Only for non-edible ornamental trees and shrubs)

NON-CHEMICAL

Eastern tent caterpillar larvae are prey for other insects, toads, and birds. Several kinds of small, beneficial wasps parasitize eggs, larvae, or pupae of this pest. Many caterpillars die from disease during unfavorable weather. Prune small twigs that have viable egg masses on them from December through March before egg hatch.

CHEMICAL

Registered insecticides should be applied in April when the caterpillars are small. To control the eastern tent caterpillars, apply registered formulations to the nests and about one foot of the surrounding branches or trunk. Apply the spray before the nests are three inches in diameter. If possible, make applications early in the morning when the caterpillars are generally inside their nests. Follow all label directions for specific information on host plant label clearance, phytotoxicity information, safety precautions, and dosage information.

Warning

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

Authored by: Gregory A. Hoover, Sr. Extension Associate

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