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# Eastern tent caterpillar

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The eastern tent caterpillar is native to North America, and records of its existence go back as far as 1646. While severe infestations occur at approximately 10-year intervals, the caterpillars are found easily throughout Wisconsin every year. Wild cherry, choke cherry, apple, and ornamental crabapple are their favorite hosts. However, they also will attack hawthorn, mountain ash, box elder, elm, maple, birch, willow, poplar, and oak trees.

Eastern tent caterpillar is frequently confused with gypsy moth. Gypsy moth does not spin silk and is incapable of producing tents. Thus, it is readily distinguished from eastern tent caterpillar.

## Symptoms and effects

The silvery, conical tents of the eastern tent caterpillar can be observed on trees in Wisconsin during May and June. The larvae feed on the foliage of host trees, frequently defoliating wide areas of trees completely. The caterpillars' dense, silken tents are constructed in the crotches of the trees and grow as the larvae feed. By early June, the host trees may be stripped of leaves, and the caterpillars will begin to wander about for additional food. When severe outbreaks occur, entire trees may be covered with a silken mantle spun by the caterpillars as they pass to and from their tents.

## Life cycle

The eastern tent caterpillar spends the winter on the twigs of its hosts in egg masses of 150 to 350 eggs. These egg masses are tapered at both ends and partially encircle the twig. The eggs are cemented together and coated with a dark brown, glue-like substance which hardens to a varnished finish.

The larvae (caterpillars) hatch in the early spring when the leaves of wild cherry trees begin to unfold. The larvae then feed in colonies. Shortly after hatching, the caterpillars construct their silken tents and remain in them when not feeding. On warm and sunny days, they go out on the foliage and feed. About 6 weeks after hatching the larvae are full grown.



**Young tree defoliated by eastern tent caterpillar in May. Note that several tents are located in branch crotches. Larval feeding will end in June, and the tree will releaf.**



**Fully grown eastern tent caterpillar.**

The head and body of the eastern tent caterpillar are deep black, and a white stripe runs down the caterpillar's back. Many short, diagonal, brownish marks are on the sides of its body. On each side is a row of pale blue spots nearly surrounded by black. The caterpillar's body is sparsely covered with fine, long, light brown hairs. When fully grown, it may range in length from 2.0 to 2.5 inches. When done feeding in late May or early June, the caterpillar spins white or yellowish parchment-like cocoons on fences, tree trunks or other available objects.

The adult moths emerge in about 3 weeks. They are reddish-brown and have two almost parallel whitish lines on their wings. Their wingspread varies in size from 1.5 to 1.75 inches, with the males usually the smaller in size. A single generation per year occurs in Wisconsin.

## Control

Populations of the eastern tent caterpillar are normally kept below damaging levels by many natural enemies such as birds and parasitic and predatory insects. However, occasionally these natural enemies are not fully effective, allowing tent caterpillar populations to build with resultant tree defoliation.

## Cultural and mechanical control

When the tree is dormant, examine the twigs and small branches for egg masses. These can be easily destroyed by rubbing them off or by snipping the twig off the tree.

Eggs hatch as the trees start to leaf out in spring. Examine the trees again at this time for the colonies of small caterpillars and their small tents. If you have just a few colonies, these can be easily removed by hand or with a forked stick or similar tool. Make sure all of the small caterpillars have been removed or destroyed.

Do not attempt to burn the tents and caterpillars. This is a hazardous procedure that will seriously injure the tree.

Trees may be weakened by severe defoliation, allowing attack by other insects or disease organisms. This is especially true of young and unthrifty trees. Maintain tree vigor by proper watering, fertilization and pruning.

## Biological control

You can control tent caterpillars, especially young ones, with a commercial preparation of spores of the bacterium *Bacillus thuringiensis* var. *kurstaki* (Bt). This bacterium is harmless to people, animals, and plants, but causes a lethal disease in many types of caterpillars. Bt is available

from many garden centers and is sold under several brand names. Be sure the product you select is the variety *kurstaki* or has caterpillars on the label. Bt is mixed and sprayed as a chemical insecticide. Because it works only as a stomach poison, be certain to thoroughly spray the leaves rather than the caterpillars or their tents. Follow label directions for proper use.

## Chemical control

If chemical controls are used, spraying the entire tree is unnecessary unless the tents are numerous. Spray only the tent and foliage within an area of 1.5 feet of the tent. Apply sprays as soon as you find tents.

A number of chemical insecticides and natural insecticides like Bt are available at local garden centers. As there are a number of different formulations of these insecticides, you should follow the detailed instructions provided on the product label. Where label directions differ from the suggestions in this publication, follow the label directions.



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