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Eastern Tent Caterpillar

The eastern tent caterpillar, *Malacosoma americanum*, is a conspicuous sight in early spring in Wisconsin. Those white masses in the forks of tree limbs are created by colonies of caterpillars. The tent protects them from predators, such as birds, and from temperature extremes. They come out of their silken webs to feed in early morning, evening or at night when it is not too cold. They return to the nest during the heat of the day and remain in the tent during rainy or cold weather. The nest enlarges in size as the caterpillars grow.

The tents of eastern tent caterpillar are a conspicuous sight in early spring.

Eastern tent caterpillar is frequently confused with fall webworm, both of which create silken nests. Fall webworm generally occurs later in the season; it feeds on almost all shade, fruit and ornamental trees except conifers; its nests are located at the ends of the branches, not in branch crotches; and their loosely woven webs enclose foliage while the tents of the eastern tent caterpillar do not. The eastern tent caterpillar is also often mistaken for the gypsy moth, but that pest doesn't make a tent, attacks many other types of trees, and caterpillars have distinctive pairs of red and blue dots down its back.

Shiny egg masses are wrapped around twigs (top). Recently hatched eastern tent caterpillars.

The eastern tent caterpillar overwinters as an egg. Masses of 150 to 400 eggs encircle small branches (about ¼ inch or smaller in diameter) and are covered with a shiny, black varnish-like material. The larvae – caterpillars – hatch about the time of bud break. They leave the tent to forage on newly emerging foliage, but return to the tent when not feeding. Caterpillars from one egg mass stay together to form a colony; caterpillars from two or more egg masses may unite to form one large colony. The hairy caterpillars are black with a white stripe down the back, brown and yellow lines along the sides, and a row of oval blue spots on the sides. Once they finish feeding, they wander away from the nest and spin a white or yellowish silk cocoon in protected places on tree trunks, fences or buildings. The reddish-brown adult moths emerge about 3 weeks later. After mating, the females lay eggs on small branches that remain until the next spring.

The adult eastern tent caterpillar moth is similar in appearance to this forest tent caterpillar moth.

Populations of this native North American pest fluctuate from year to year, with outbreaks occurring every several years. Natural enemies, especially various parasitic wasps, some predators and a few diseases reduce numbers in most years, which partly accounts for the variation in population levels from year to year.

Trees most commonly affected are fruit trees, such as apple, cherry, flowering crabapple, plum, and chokecherry. They may also defoliate other hardwood trees, including ash, birch, hawthorn, maple, oak, poplar and willow.

While heavy infestations can cause serious defoliation, eastern tent caterpillars rarely kill trees except those already weakened by disease or climate and environmental stresses.

Eastern tent caterpillar is more of a nuisance than detrimental to tree vigor. Feeding does not seriously damage healthy, mature trees – the damage is primarily cosmetic, with trees appearing ragged or unsightly. Even if completely defoliated, most trees will leaf out again within two or three weeks, since caterpillar feeding generally ends during vigorous leafing activity. Small trees cannot tolerate as much defoliation without health consequences, yield on fruit tress will be reduced and trees already weakened by disease or environmental stresses may be killed. And the nests can be an eyesore in the landscape, particularly when exposed by excessive defoliation.

Caterpillars create silken nests in the crotches of branches of certain trees.

In addition to their feeding damage and unsightly silken nests, this insect can be a nuisance when caterpillars wander about looking for places to pupate. The hairy caterpillars are about 2 inches long when fully grown, with a conspicuous white line running along the back. They create quite a mess when they are accidentally squashed on roads, driveways, sidewalks and patios.

This insect pest is easiest to control early in the season.

- Remove and destroy egg masses during the winter. They can be pruned out or crushed off the branch. On larger trees with many egg masses, dormant oil sprays work very well to suffocate the eggs and prevent them from hatching.
- In early spring, remove small tents by hand (wearing gloves).
- Remove larger webs with a broom or stick and disposed of the webs along with the caterpillars (crush, burn or bury them). Wait until the caterpillars are inside the nest, or they may re-establish. Do not attempt to burn tents, as this can cause more damage to the tree than the caterpillars would.
- Use a registered insecticide only if the caterpillars are less than one inch in length. Insecticides are not very effective against larger caterpillars, which have done most of their feeding anyway. If the tree is flowering, do not use any products which can kill pollinating bees – use *Bacillus thuringiensis* (BT) which only affects caterpillars.

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– All photos by Phil Pellitteri, Department of Entomology, University of Wisconsin

Additional Information:

- Eastern Tent Caterpillar – UW-Extension Publication A2933 at learningstore.uwex.edu/Eastern-Tent-Caterpillar-P428.aspx
- Webworms – UW-Extension Garden Fact Sheet X1066 at hort.uwex.edu/articles/webworms