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# **Ohio State University Extension Fact Sheet**

### Entomology

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## **Eastern and Forest Tent Caterpillars and Their Control**

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Nests or tents of the eastern tent caterpillar, *Malacosoma americanum* (Fabricius), are a common sight in along fence rows and in homeowner trees in many parts of Ohio during the spring months. Its close cousin, the forest tent caterpillar, *M. disstria* Hubner, doesn't make a tent at all though the caterpillar may be common in wooded areas. Both caterpillars are commonly mistaken for gypsy moth larvae by home owners or wood lot managers.



The eastern tent caterpillar makes its nest in the fork of branches and does not inclose leaves like the fall webworm. Tent caterpillars are generally active until early June and fall webworms are active in July through September.

Both tent caterpillars are found across Ohio but the forest tent caterpillar is most common in the eastern half of the state.

#### **Plants Attacked**

The eastern tent caterpillars prefer wild cherry along roadways, but it can be found making nests in ornamental apple, crabapple, plum, peach, and cherry in landscapes. Occasionally it will form nests in ash, birch, willow, maple, oak and poplar. The favorite food of the forest tent caterpillar is also wild cherry but oaks, maples, hawthorns, and many other shade and forest trees may be attacked.



#### Damage

One or two colonies can completely defoliate small trees. Periodic, major outbreaks result in numerous colonies in larger trees which can also do considerable defoliation. Since this defoliation occurs early in the season, the plants must set out new leaves at considerable energy expense.

Besides making a tree look unsightly with the webs it constructs in the crotches of limbs and branches, the caterpillars arouse much concern among area residents when they migrate in mass in search of new food or a place to complete their development. During periods of migration, caterpillars may be seen by the thousands traveling over roads, streets, driveways, and sidewalks.

#### **Description and Life Cycle**

The eastern tent caterpillar is easily identified when it builds its white silk nest in the crotch of small trees or where several limbs meet on larger trees. Eastern and forest tent caterpillars have thick, tan hair and are black in color with irregular blue and white mottling. Some of the white markings define stripes. The

eastern tent caterpillar has a diagnostic solid white stripe down the back while the forest tent caterpillar has a series of keyhole-shaped spots.

Tent caterpillars overwinter in the egg stage. Egg masses are attached to small twigs and appear as a shiny, dark gray foam rapped around the twig. These masses are about one inch long and contain 150 to 350 eggs. The eggs hatch in early spring just as the leaf buds begin to show green. The tiny black caterpillars sun themselves on the egg mass but soon move to a nearby fork in the branches. Here they begin to spin silk and form a tent.



The larvae migrate to the new leaves to feed, usually in the morning or early afternoon. After feeding the larvae return to the nest. The larvae lay down silk trails wherever they go and these trails serve as roadways for other larvae. Feeding continues for four to six weeks until the larvae are about two inches long. Mature larvae usually leave the nest and tree to search for a suitable place to spin a cocoon. The larvae spin compact, spindle-shaped cocoons of white to yellow silk. The adults emerge in two to four weeks. The adults are about one inch long, are reddish brown in color and have two creamy-white stripes running obliquely across the front wings. Forest tent caterpillars do not make a nest and the adults moths have dark brown stripes instead of white. Mating occurs soon after emergence and the females attach their new egg masses to tree branches. These masses stay on the tree until the following spring. There is only one generation per year.

#### **Control Hints**

People often get overly concerned when they see large numbers of nests in roadside wild cherry. Fortunately these pests rarely reach large populations in ornamental trees.

**Strategy 1: Mechanical Control - Destroy Egg Masses and Nests** - The egg masses are easy to spot after the leaves have dropped in the fall. Simply clip off and crush or dispose. If egg masses were undetected, there is ample time to hand remove any nests in the spring. It is suggested that a glove be used as the caterpillar hairs are irritating to some people. Simply scrape the nest off onto the ground and crush the caterpillars or drop them into a pan of soapy water. Early morning or late afternoon is best because most of the caterpillars will be in the tent.

**Strategy 2: Biological Control - Use Bacillus thuringiensis (Bt)** - Most commercial Bt products for caterpillar control will work on the tent caterpillars. Make applications to the plant foliage while the larvae are small. Numerous predators and parasites also attack this pest but in some years these agents do not arrive in sufficient numbers to adequately control tent caterpillars.

**Strategy 3: Chemical Control - Insecticide Sprays** - Most contact and stomach insecticides rapidly control this pest. Direct sprays to the plant foliage and nest. The larvae are usually easy to contact if spraying is done in late morning when the larvae congregate on the tent surface to warm in the sun. See Bulletin 504 for currently registered insecticides.

NOTE: Disclaimer - This publication may contain pesticide recommendations that are subject to change at any time. These recommendations are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Due to constantly changing labels and product registrations, some of the recommendations given in this writing may no longer be legal by the time you read them. If any information in these recommendations disagrees with the label, the recommendation must be disregarded. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author and Ohio State University Extension assume no liability resulting from the use of these recommendations.

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