Eastern Tent Caterpillar and Forest Tent Caterpillar

Webs of the eastern tent caterpillar are a common sight in spring wherever wild cherry trees are abundant. The unsightly webs in the forks of trees are an early sign of this insect’s presence. The caterpillars hide in the webs at night and feed among the leaves during the day.

Plants Attacked

Wild cherry trees are their favorite host plant and serve as the starting place for eastern tent caterpillar outbreaks. After caterpillars eat all the cherry leaves they will often crawl to other nearby trees and feed on them. Flowering crabapples and hawthorns are frequently attacked. In some areas heavy outbreaks may occur every ten years on trees such as, peach, plum, witch hazel, rose, beech, birch, willow and poplar.

Damage

In severe outbreaks caterpillars can defoliate entire cherry trees. Leaf loss will weaken these trees, but defoliation often occurs early enough so that wild cherries can replace the eaten leaves with new ones. However, other tree species may be killed because they don’t have enough time to grow a new set of leaves for food production and storage needed for winter survival.

Life Cycle

The overwintering eggs are contained in one inch long, black, gall-like masses on slender twigs (see illustration). They have a protective covering that feels like styrofoam. Depending on weather conditions the eggs hatch around the first week of April in central Maryland. This may even occur before the wild cherry buds have opened. Young caterpillars are completely black. After a few days they spin the silk tents which they enlarge as they grow. As the
caterpillars mature they develop a distinct white stripe down the back (see illustration). Most feeding damage is done in May by the large caterpillars that mature by the end of May. When they finish feeding they leave the trees to seek hiding places where they can spin protective cocoons. The small brown moths emerge from cocoons in early summer, and mate to produce the overwintering eggs. Only one generation occurs each year in Maryland.

The forest tent caterpillar has a series of white spots down the back (see illustration) instead of the solid white stripe found on the eastern tent caterpillar. It does not make a tent and prefers oak and other shade trees to wild cherry. The life cycle is similar to the eastern tent caterpillar.

Control

Cultural Control: Where possible wild cherry trees should be removed from hedgerows and fields bordering properties with valuable ornamentals susceptible to tent caterpillar attack (such as flowering crabapple and cherry). During the dormant season twigs with egg masses can be pruned out and destroyed. For those who are not squeamish, heavy gloves can be worn to rip out the developing tents with their caterpillars.

Chemical Control: If chemical control is essential, use B.t. as soon as the silk tents are observed in early spring. B.t., which stands for Bacillus thuringiensis, is a natural insecticide that only affects caterpillars. B.t. is harmless to humans and animals. It must be sprayed on leaves the caterpillars will eat. After eating sprayed leaves the caterpillars become sick, stop eating and die in a few days. B.t. must be used in April since only young caterpillars are highly susceptible to this insecticide. It is available under many trade names including: Thuricide, Dipel, Caterpillar Attack, Biotrol, etc.

USE INSECTICIDES WITH CARE. READ THE LABEL DIRECTIONS. FOLLOW ALL SAFETY PRECAUTIONS.

Mention of trade names in this publication does not constitute an endorsement by University of Maryland Extension.