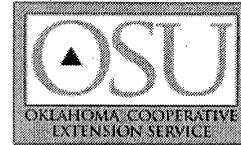


# PLANT DISEASE AND INSECT ADVISORY



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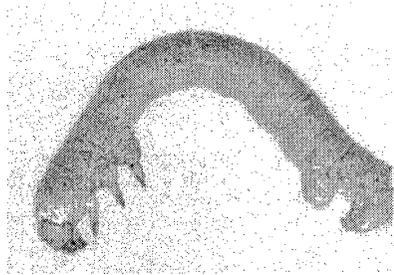
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May 1, 2002

## Caterpillars "Leaving" a Mess in Your Trees?

Tom A. Royer, Extension Entomologist

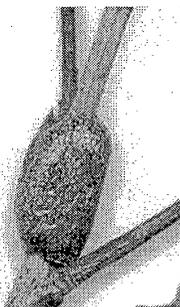
As the trees leaf out this spring, they provide a bounteous food source for hungry caterpillars. Spring cankerworm, eastern and forest tent caterpillars are becoming noticeable in oaks and other trees this spring. When numerous, they become a concern to homeowners. The following is a short description of the caterpillars along with a brief life history, and some recommendations for management.



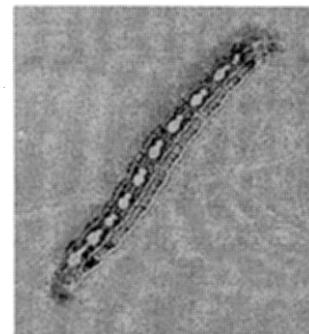
Spring cankerworm is also known as the "inchworm". They range in color from green to dark brown to nearly black and when full grown, they reach about 1 inch long. They have two pair of abdominal prolegs. When disturbed, they often let themselves down on a strand of webbing, and can thus be moved from tree to tree with the wind. They also will stand nearly erect on their prolegs, giving them the appearance of small twigs.

Spring cankerworm overwinters as a larva that pupates in late winter through spring. Adults begin to mate and emerge in late February. The female moth is wingless, and measures about ½ inch in length, and has a set of stiff, reddish spines that point towards the tip of the abdomen. She crawls up the trunk of the tree and deposits up to 100 eggs in the crevices of the bark.

The forest tent caterpillar and its close cousin, the eastern tent caterpillar are pests of various trees. The eastern tent caterpillar prefers cherry, apple and crabapple. It makes a tent at the fork or crotch of a tree, and move out during the day to feed on leaves as they emerge from bud. The eastern tent caterpillar is black with a white stripe down the back and a series of brilliant blue spots between a pair of yellow lines that run the length of the body.



The forest tent caterpillar attacks sweetgum, various species of oak, ash, maple, elm and basswood. They hatch in spring from an egg mass that encircles a twig of the host tree and was deposited the following summer. They undergo one generation per year. The caterpillar can be distinguished from the eastern tent caterpillar by the row of keyhole-shaped markings on their back. Upon hatching, they



remain gregarious for a while, and will often molt together in a silken mat that they spin around a branch. Unlike the eastern tent caterpillar, they rarely make a tent. When full-grown, the caterpillars spin a yellow cocoon, often in between folded leaf blades, in which they pupate. Adults emerge in June. Full-grown caterpillars may reach 2 inches long.



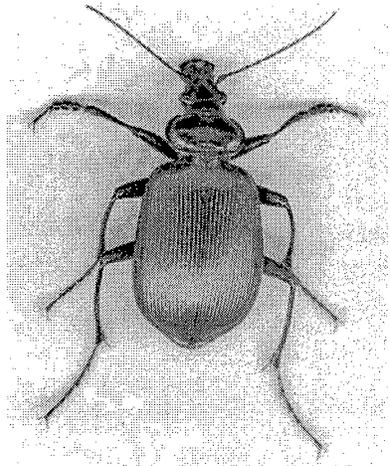
Control of any of these caterpillars is usually not necessary because their numbers are kept in check by a multitude of natural enemies such as the fiery searcher beetle and many parasitic flies and wasps. Even if the caterpillars become numerous, a healthy tree can withstand a complete defoliation early in the growing season. New transplants, or trees weakened by weather or other factors may require control. These caterpillars are very susceptible to products containing *Bacillus thuringiensis*, such as Javelin, Dipel, Bactospeine or Ortho's B.t. Biospray. Control is best achieved before caterpillars become full-grown, and it is essential to get thorough coverage.

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## Ground Beetles in "Search" of Those Bright City Lights

Tom A. Royer, Extension Entomologist

I have received reports of a mini-invasion of beetles in the city of Tulsa. By the description given to me, they appear to be a type of ground beetle that is sometimes referred to as "Searchers". These beetles are voracious predators of other insects, and are particularly fond of caterpillars. They are also highly attracted to lights at night. One species, which is sometimes referred to as the "fiery searcher" can be found climbing trees in search of caterpillars such as the forest tent caterpillar or the spring and fall cankerworm. I have seen some of these beetles in oak trees this past week, which coincidentally were also infested with forest tent caterpillars. Another species was purposefully imported into the US to help control gypsy moth and has become fairly well established in the eastern states where gypsy moth has been a continual pest.



These beetles are among the largest of the ground beetles, sometimes reaching a length of more than 1½ inches. They are also quite colorful, possessing an iridescent color on their elytra that ranges from a dark violet to green. They typically

overwinter as adults and become active in the spring as their prey become numerous. Both adults and larvae are predacious, but the larvae cannot climb trees to hunt for food. Be somewhat careful in handling them, they can bite, and may give off a very obnoxious odor when disturbed. While these beetles may be a nuisance, they are beneficial and just might keep your trees from becoming defoliated by leaf-feeding caterpillars.

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