POULIN'S PEST CONTROL
www.poulins.ca

FOREST TENT CATERPILLARS

There are four species of tent caterpillars across Canada, but the most notorious, the Forest Tent Caterpillar, doesn't really live in a tent. The others – the Eastern, Western and Prairie Tent Caterpillar – true to their names, spin tent-like webs for protection during the larval stage. The Forest Tent Caterpillar is by far the most prevalent and widely distributed of the four species, occurring from Nova Scotia to British Columbia.

MASS MIGRATION

The Forest Tent Caterpillar is generally more familiar to people than other destructive forest pests because of its tendency to migrate in large masses during the larval stage and to appear in massive moth flights during outbreak years. Widespread outbreaks of the Forest Tent Caterpillar occur about every 10 – 13 years, but there have been lulls as short as 6 years and as long as 16 years between outbreaks. When they do occur, they may last from 3-6 years, depending on weather conditions and other environmental factors.

DAMAGE

The Forest Tent Caterpillar feeds on the foliage of trembling aspen and other members of the poplar family, sugar maple, birch, ash, oak and many other deciduous trees and shrubs. When starvation threatens, a migrating population has even been known to attack conifers. The other three species also feed on a variety of hosts, but prefer the leaves of cherry, apple, gooseberry, and willow trees to those of the poplars.

Fortunately, the caterpillars seldom kill trees outright, even when they completely strip them of foliage. Trembling aspen will sometimes refoliate the same year after a severe attack, using buds originally meant for the following spring's growth. Radial growth of the tree is reduced, however, and it is weakened, making it more vulnerable to disease. Development of the tree may be affected for two years following an attack.

LIFE CYCLE

The life cycle of the tent caterpillars begins about midsummer, when the female moths encircle twigs on the host tree with bands of eggs 12-24 mm wide, covered with a dark-colored, glue-like substance. The following spring, when the leaves begin to unfold, the small caterpillars emerge and begin their destructive feedings.

The larvae molt four times during their four to six-week phase of life, after which they spin cocoons of several layers of silk to enter the pupal stage. 10 to 14 days later, the adult moth emerges to repeat the life cycle. The moths are of varying shades of brown, and have a life span of about 10 days, during which they mate, with the females laying from 150 to 200 eggs in a ring like mass. During their short lifespan, the moths fly actively, with winds sometimes carrying them great distances.

CONTROL

Fortunately, the caterpillars are controlled by various natural factors. Starvation often wipes out populations that have "exploded" under ideal conditions and subsequently exhausted their food supply. Also, the caterpillars are attacked by more than 40 types of parasites – some attacking the eggs, some the larvae and others the cocoons. The flesh-fly is an important control agent, depositing live maggots on the cocoons to feed on the body tissue of the pupae.

Mechanical means of control (without the use of chemicals) are often sufficient to remove tent caterpillars from single trees and small groups. Egg masses may be knocked off twigs, and twigs bearing colonies of caterpillars can be cut off and burned. During the summer, tent colonies can be manually removed with a broom and put into a garbage bag.

BTK Biological Insecticide can be sprayed onto the foliage, the Forest Tent Caterpillars will then eat the leaves and die. BTK is harmful to caterpillars but is safe for all other insects and animals, including humans.

Mass migrations onto previously treated trees or small ornamentals can be easily prevented by means of a barrier or collar wrapped around the stem. This may consist of a narrow strip of masking tape or aluminum foil on which is smeared any one of a number of petroleum products. The same principle could be used on houses, cottages, sun decks and other structures. There are some insecticides that are registered for use against tent caterpillars on forest trees, shrubs and ornamentals.