

# Effective Control

# Caterpillars

ent caterpillars have been observed in North America since 1646. Outbreaks occur approximately every 10 years and sometimes last up to two years. Although they seldom kill the infested tree, tent caterpillars can cause severe damage, often nearly defoliating the entire tree. If damage is minor, the tree can bud again later in the summer, but if severe enough, the tree may take up to two years to recover. The three most common species in Canada are the Eastern tent, the Western tent and the Forest tent caterpillar.

# Description

Forest tent caterpillars feed on deciduous trees in many parts of Canada. Outbreaks last two or more years and occur at intervals of six to 16 years. They have a similar life cycle to the Eastern and Western tent caterpillars, with one distinct difference. Instead of building tent-like webs, they make a type of silken mat on the branches where they collect to rest, leaving only to feed on the leaves. These caterpillars are a pale blue colour with black, and have a series of white spots on the back. The adult moth is a yellowbrown colour.

Eastern tent caterpillars are hairy, brownish-black with a light stripe down the back. Blue spots and brown-yellow lines are found along the sides of their bodies. The adult moths are usually a reddish-brown colour, but can be yellow-brown as well.

Western tent caterpillars tend to be reddish-brown on top and pale underneath. They have a row of blue spots on their backs, with orange spots interspersed in between. The adult moths are orange-brown with yellow lines on the wings.

# Biology and Lifecycle

The adult tent caterpillar moth lays its eggs in midsummmer and early autumn. The eggs are deposited in dark brown saddle-like cases which are 2 cm long, contain 150 to 350 eggs, and straddle or encircle twigs of susceptible trees.

In the spring, the eggs hatch into young caterpillar larvae that make communal tent webs, usually in tree or branch forks. The caterpillars mature in four to six weeks, reaching a length of about 2 to 3 cm.

In June to early July, the caterpillars enter the pupal stage of development, encasing themselves in cocoons. The cocoons may be found on tree trunks, fences, debris and beneath sheltered areas such as raised plant boxes. After about 10 days, the adult moth emerges and mates within 24 hours. The female immediately begins to lay eggs for the next spring, producing only one generation of tent caterpillars every year.

#### Habitat

Caterpillars feed on deciduous trees in most parts of southern Canada. The Eastern tent caterpillar feeds on cherry, apple and crabapple trees. The Western tent caterpillar chooses willow, poplar, apple, plum, cherry and oak, while Forest tent caterpillars seem to prefer ash, birch, maple, oak and poplar.

Since tent caterpillars are native to North America, insect parasites and natural predators such as birds and rodents control a certain percentage of the population. However, some means of control may be necessary where infestations are severe.

# **Physical Control**

In the summer, look for tough, yellow-to-white cocoons on tree trunks, fences, debris and sheltered areas. In the fall, look for shiny, dark brown saddle-like cases which straddle or encase twigs of trees which are known to be susceptible to tent caterpillar infestations. Destroy egg-cases and cocoons by scraping them with a knife or by burning them.

In the spring, if webs are present, wipe the affected branch with an unlit cloth soaked in kerosene. When tents are fairly large, cut off the infested branches and burn or crush individual webs.

Burlap wrapped around the trunk of infested trees will trap mature caterpillar larvae as they crawl down trees seeking a place to pupate. Place the burlap at about chest height, tied in the center, then folded in half. The caterpillar larvae can be found here in the day as they are searching for shade,

but become trapped. Check burlap traps daily to collect insects.

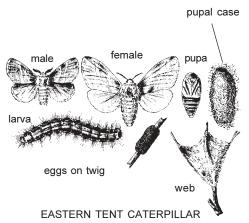
## **Biological Control**

The bacterium *B.t.* (*Bacillus thuringiensis*), is a selective biological insecticide. After ingestion of vegetation treated with B.t., caterpillar larvae cease to feed and die within five days. Insects which do not have a larval stage in their development are not affected by B.t. Products which contain this bacterium are also non-toxic to mammals, birds and fish.

## **Chemical Control**

If an infestation of caterpillars is suspected, a dormant oil spray may be used on susceptible trees in late winter to smother the eggs before they hatch in early spring.

Products which contain methoxychlor, carbaryl, permethrin and resmethrin are registered for control of tent caterpillars. If the tent is within reach, break it open with a stick and direct the insecticide into it. Spraying is most effective in the evening, as the caterpillars return to the nesting area at night.





#### Remember

#### Before Purchasing a Pesticide Product

- ➤ Identify the pest correctly.
- ➤ Use physical control methods and alternatives to pesticides.
- Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment location (e.g., indoor, outdoor, garden uses, pet treatment).
- > Purchase only the quantity of product needed for the treatment.
- ➤ Alternatively, you may choose to hire a licensed pest control operator.

#### When Using a Pesticide

- Carefully read all label instructions and precautions before using pesticides.
- Do not drink, eat or smoke while applying pesticides.
- > Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- ➤ If kitchen area is to be treated, cover or remove food, dishes and utensils.

#### After Handling a Pesticide

- > Always wash your hands thoroughly after handling any pesticide product.
- > Do not permit persons or pets to contact treated surfaces until residue has dried completely.
- > Provide adequate ventilation of treated areas after use.
- Wipe clean all surfaces that come in direct contact with food, such as counters, tables and stovetops, including indoor and outdoor surfaces.
- ➤ Always store pesticides out of reach of children and pets and away from food and beverages.

#### In Case of Accidental Poisoning

- ➤ Call a poison control centre immediately and seek medical attention.
- Take the pesticide container or label with you to the emergency facility or physician.
- > Follow first aid statements on the label.
- In case of accidental poisoning of pets seek veterinary attention immediately.

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#### When Disposing of Pesticides

Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.

Unused or partially used pesticide products should be disposed of at provincially or municipally designated household hazardous waste disposal sites.

#### Use Common Sense

- > These are general recommendations.
- > Consult the label for specific instructions.
- > When in doubt, contact a professional.

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