

## Gypsy Moth Spraying

### What is the gypsy moth?

The gypsy moth, *Lymantria dispar*, is a harmful forest pest typically found in urban areas.

The life cycle of the gypsy moth is similar to many other moths. It reproduces one generation each year. The gypsy moth's life cycle has 4 distinct stages: egg, larva or caterpillar (see photo below), pupa and adult.

The female moth lays eggs – called egg masses – on trees, lawn furniture, cars, trucks, travel trailers, and campers. Often the egg masses travel hundreds of kilometers to a different location before hatching and starting a new infestation in the spring.



*Early caterpillar*

### Where is the gypsy moth found?

The species originated in Europe and Asia. Today the gypsy moth is found mainly in the temperate regions of the world, including central and southern Europe, northern Africa, central and southern Asia, and Japan.

In Canada, the gypsy moth can be found in Ontario and Quebec, and has been spreading to parts of southern New Brunswick and Nova Scotia for several years.

Since 1978, the gypsy moth has also been found in many parts of British Columbia. Monitoring, public awareness, and eradication programs, such as aerial spraying, have kept the spread of the gypsy moth under control.

### Why is the gypsy moth a concern?

The gypsy moth can cause serious effects on plant life or vegetation. This species causes defoliation, which results in reduced growth or mortality of trees and shrubs. Defoliation and tree loss also impact property values in urban areas.

In BC, the gypsy moth is a serious threat to major fruit producers. It eats the leaves of fruit trees and specific berries, such as blueberries. A gypsy moth infestation in BC could also impact other industries, including agriculture and the export of lumber, Christmas trees and nursery products.

Human exposure to airborne gypsy moth hairs, silken threads, and shed skins during *large-scale infestations* have been reported to result in skin rash and possible upper respiratory tract symptoms. *Large-scale infestations* are not anticipated in BC, and it is unlikely that exposure to gypsy moth will affect human health.

### How is the gypsy moth population being controlled?

Many methods are used to monitor and control the gypsy moth population in BC, including mass trapping, ground and aerial spraying. Aerial spraying of the commercial product Foray 48B® is the method used for controlling gypsy moth populations over large areas.

Foray 48B® is a water-based product containing a bacterium called *Bacillus thuringiensis* variety kurstaki (Btk). Btk is a bacterium found in soil. It is known to affect only caterpillars, such as the gypsy moth larvae, and only if ingested while feeding. In addition, Foray 48B® contains a number of inert ingredients that help the spray stick to leaves after it is applied. These include approved food grade additives. No petroleum products are used.

Foray 48B® is not harmful to humans, birds, pets, fish, honeybees, beetles, or spiders. Btk pest control products have been registered for use in Canada for about 40 years. It is now the most widely used pest control product in the world.

### What happens during aerial spraying?

Aerial spraying of Foray 48B® is usually done in the spring between April and June. The spraying starts between 5:00 a.m. and 7:30 a.m., and is completed in about 1.5 hours. Residents might notice a musty smell associated with the spray. Each aerial spraying application will be spaced 7 to 10 days apart depending on the weather.

Residents in the area to be treated are advised at least 24 hours in advance. Information is provided to residents by the local media, the gypsy moth hotline, websites and e-mail.

### Are there any health concerns?

The results of public health monitoring have not shown any increase in illnesses seen by physicians or in hospital emergency room visits due to spraying. As well, the study has not shown evidence of adverse effects on children with asthma or those with weakened immune systems from aerial spraying of Foray 48B®.

Residents who wish to avoid contact with the spray are recommended to stay indoors while their property area is being sprayed, and up to 30 minutes following the spray. Individuals with health problems who are concerned their conditions may get worse due to the spraying should consult their doctor.

In addition to staying indoors during the spraying, good hygiene is recommended. This includes:

- Washing hands throughout the day, especially after gardening, after going to the bathroom, or before preparing food.
- Washing all fruits and vegetables before eating or cooking.
- Maintaining home swimming pools.
- Cleaning or wiping indoor and outdoor equipment at daycare centers and preschool facilities, as well as covering sandboxes or sandpits.

### For more information:

- Visit the Ministry of Forests and Range website at: [www.for.gov.bc.ca/hfp/gypsymoth/](http://www.for.gov.bc.ca/hfp/gypsymoth/) for more information, including maps showing the locations of the treatments.
- An e-mail subscription service is available on the Ministry of Forests and Range website at: [www.for.gov.bc.ca/his/Listserv/GypsyMoth.htm](http://www.for.gov.bc.ca/his/Listserv/GypsyMoth.htm).
- Call the Ministry of Forests and Range, Forest Practices Branch at 250-387-8739.



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