

# Forestry



# Insects and Diseases

Balsam twig aphid

Beech bark disease

Dutch elm disease

Gypsy moth

Larch sawfly

Spruce bud moth

White pine weevil

Balsam wooly aphid

Butternut canker

Forest tent caterpillar

Hemlock looper

Spruce budworm

Whitemarked tussock moth

White pine blister rust

# Balsam twig aphid

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=5549&ind=B>



**Exotic insect**



**Balsam fir**

**Main host**

**Sap-feeding Piercing-sucking**

**Damage type**

**Needles**

**Micro-habitat**

**Will not kill tree**

# Balsam woolly adelgid

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=5314&ind=B>

## Exotic insect

**Main host** Balsam fir

## Damage type

Sap-feeding, gall-forming, piercing-sucking

## Micro-habitat(s)

Branch, root collar, trunk, twig

**Will kill tree if outbreak severe**



# Beech scale

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=5973&ind=B>

**Exotic disease**

**Main host**

**Diet and feeding behaviour**

**Micro-habitat(s)**

**Will sometimes kill tree. Makes wood useless except for fuelwood**

American beech

Sap-feeding, piercing-sucking

Branch, trunk



# Butternut canker

<http://www.cfs.nrcan.gc.ca/news/457>



**Exotic disease**

**Main host**

Butternut

**Diet and feeding behaviour**

Fungus feeds under bark

**Micro-habitat(s)**

Branch, trunk, roots

**Will kill tree**



# Dutch elm disease

<http://www.imfc.cfl.scf.rncan.gc.ca/maladie-disease-eng.asp?geID=10&ind=D>



## Exotic disease

### Main host

White elm

### Diet and feeding behaviour

Fungus damages the cambium layer under the bark

### Micro-habitat(s):

Branch, Leaf, trunk

### Will kill tree



# Forest tent caterpillar

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=9374&ind=F>



## Native insect

### Main host(s)

Beech, apple trees, basswood, cherries, gray birch, mountain-ash, red oak, sugar maple, **trembling aspen**, white ash, white birch, white elm, willow

### Damage type

Defoliation

### Micro-habitat(s)

Leaf

### Tree will usually survive



# Gypsy moth

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=9506&ind=G>

## Exotic insect

## Main host(s)

Beech, apple trees, ash, balsam fir, cherries, eastern hemlock, gray birch, hickories, larch, pines, poplar/aspen, red maple, red oak, spruce, sugar maple, trembling aspen, white birch, white elm, willow

**Damage type**      Defoliation

**Will kill tree**



# Hemlock looper

<http://www.mfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=8846&ind=H>



**Native insect**

**Main host(s)**

Balsam fir, black spruce, eastern hemlock, sugar maple, white birch, white spruce

**Damage type**

Defoliation

**Micro-habitat(s)** Leaf, needle

**Will kill tree**



# Larch sawfly

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=7907&ind=L>



**Native insect**

**Main host(s)** European larch, subalpine larch, tamarack, western larch

**Damage type** Defoliation

**Micro-habitat(s)** Needles

**Will kill tree**



# Spruce budworm

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=12018&ind=S>



**Native insect**

**Main host(s)**

Balsam fir, black spruce, eastern hemlock, jack pine, Norway spruce, red spruce, tamarack, white spruce

**Damage type**

Defoliator

**Micro-habitat(s)**

Bud, cone, male flower, needle

**Will kill tree**

# Spruce bud moth

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=11208&ind=S>



**Native insect**

**Main host(s)** Black spruce, white spruce

**Micro-habitat(s)** Annual shoot, Needle

**Does not kill tree**



# Whitemarked tussock moth

<http://www.cfs.nrcan.gc.ca/news/437>

**Native insect**

**Main host(s)** Most hardwoods and softwoods

**Damage type** Defoliation

**Will kill tree**



# White pine weevil

<http://www.imfc.cfl.scf.rncan.gc.ca/insecte-insect-eng.asp?geID=1847&ind=W>



**Native insect**

**Main host(s)** Eastern white pine, jack pine, Norway spruce, scots pine, white spruce

**Damage type** Weevil larvae feed on inside of young vigorous shoots

**Micro-habitat(s)** Terminal shoot

**Does not kill tree**



# White pine blister rust

<http://www.imfc.cfl.scf.rncan.gc.ca/maladie-disease-eng.asp?geID=24>



**Exotic disease**

**Main host(s)** Eastern white pine, gooseberry & currant bush, limber pine, western white pine, whitebark pine

**Micro-habitat(s):** Branch, Trunk

**Will kill tree**



# Emerald Ash Borer



- **Exotic disease**
- **Main host (s):** White ash, green ash, black ash
- **Micro-habitat (s):** Trunk
- **Will kill tree**



# Brown Spruce Longhorn beetle



- **Exotic disease**
- **Main host (s):** Red spruce, black spruce, white spruce, Norway spruce
- **Micro-habitat (s):** Trunk

