

TOP 10

FOREST PESTS IN B.C.

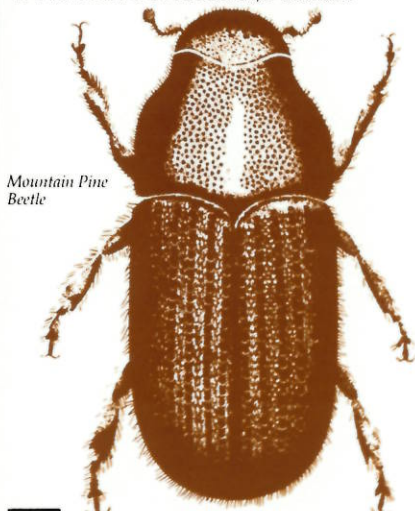
There are hundreds of insect and disease species which cause trees to die or reduce their growth, but relatively few of these exist in large numbers. Some are cyclical. (There has not been an outbreak of hemlock looper for 30 years, for example, but one could start tomorrow.) So foresters try to intervene in the case of about 10 insects and 10 diseases, and monitor the condition of the rest. Listed below are the 10 most damaging pests to B.C.'s forests.

1 Dwarf Mistletoe

This parasitic plant lives on interior lodgepole pine, Douglas fir, larch and coastal hemlock. It siphons off the nutrients that ordinarily would go towards tree growth and may cause distortion in the tree trunk and limbs. Mistletoe doesn't usually kill trees, but the loss of tree growth it causes is estimated to be one third of the 16 million cubic metres of wood claimed by insects and disease annually in B.C.

2 Mountain Pine Beetle

The mountain pine beetle bores under the bark of mature lodgepole and ponderosa pine, leaving behind a blue stain and eventually killing the tree. If infected trees are logged out quickly the lumber can be salvaged. Also, attempts are made to harvest stands of timber likely to be infested by the bug and so deny it its major source of food. If all the wood destroyed by the mountain pine beetle in the past five years instead had been exported, the total export value would have exceeded \$5 billion.



Mountain Pine Beetle

3 Spruce Bark Beetle

This insect kills trees in the same manner as the mountain pine beetle, only its hosts are Englemann, Sitka and white spruce. In parts of the Prince George Forest Region all logging activity is focused on salvaging beetle-killed trees or on trying to prevent the beetle's spread.

Western Spruce Budworm



4 Western Spruce Budworm

Despite its name, the western spruce budworm feeds on Douglas fir, true firs and spruce. Its prime target is Douglas fir in the Vancouver, Kamloops and Cariboo Regions. A defoliator, it causes tree deformities, loss of tree growth and finally, tree mortality. This is not the same species of spruce budworm that has wreaked havoc with forests in eastern Canada. The extent of damage in B.C. caused by the western spruce budworm is still being assessed.

5 Root And Butt Rot

This is a fungus which infects the roots of coastal hemlock trees, eventually killing them. Simply cutting or removing the infected trees will not necessarily eliminate the rot; it can remain in the ground for decades and infect trees planted later. This makes root rot a serious threat to the forests, and the only treatment for it is remove the infected stumps.

6 Laminated Root Rot

This is a different fungus which infects the roots of important tree species such as the coastal Douglas fir.

7 Douglas Fir Tussock Moth

This insect is a defoliator; it kills trees by eating the new and old foliage on Douglas fir trees. Infestations last four to five years and then collapse due to a naturally occurring virus. Experiments aim to introduce the virus earlier in order to check the spread of the moth.

8 Douglas Fir Bark Beetle

This insect is a chronic problem in mature and overmature Douglas fir stands, particularly in the B.C. interior. Though not widespread at the moment, this insect can kill trees previously weakened by the western spruce budworm or Douglas fir tussock moth. It does so by boring under the bark in the same manner as the mountain pine and spruce bark beetles. Trap trees can attract the insect and prevent its spread to some extent.

9 Cone And Seed Pests

A variety of insects and diseases are capable of destroying whole crops of tree cones and tree seed. For example, no seed could be collected from spruce trees in the Prince George area in 1979 because of the presence of disease. Also, seed and cone insects and diseases can threaten the survival of seed orchards, where the seed for future generations of trees is developed.

10 Plantation Insects And Diseases

Insects and diseases also pose a serious threat to the survival of new tree plantations. The black army cutworm is an example of one insect that in certain years has destroyed much of the new planting done that year. Various shoot and root feeders can cause deformities and loss of growth in new trees.

Root Rot

