

Identification

Mountain Pine Beetle



Is it a Pine?

Mountain pine beetles (MPB) attack and kill mature pine trees (approximately 80 years and older). Alberta has four native species of pine - lodgepole, jack, limber and whitebark – which are all vulnerable to infestation by beetles.

Pine trees

Pine trees are easily distinguished by the length and shape of their needles. Spruce needles are square, fir needles are flat, and pine needles are long. Another distinguishing feature is the arrangement of needles. Pine needles are grouped in clusters with 2, 3 or 5 needles per cluster. Spruce and fir needles are attached individually to the branch.

MPB can attack other tree species such as spruce, but do so only when pine is no longer available. They are unable to reproduce within spruce trees and as a result, attacks are not successful.

Is it mountain pine beetle?

What are the signs?



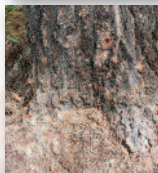
Pitch Tubes

Cream-coloured resin that looks like crystallized honey and oozes out of entry holes in the trunk. This is a natural defence to 'pitch' the beetle out.



Boring Dust

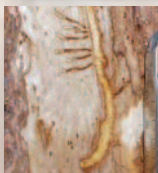
Collects in bark crevices and around the base of trees from beetle boring under the bark.



What you do not see:

J-Shaped Adult Galleries

Beginning above the entrance hole and running along the grain of wood are J-shaped galleries. Eggs are deposited within these galleries.



Horizontal Larval Galleries

Single galleries that run perpendicular to adult galleries.



Blue Stain Fungi

Sapwood turns a greyish-blue colour because beetles carry spores of blue-stain fungus that stains the wood. This can only be seen when viewing a cross-section of the tree.



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