



SPRUCE BEETLE (*Dendroctonus rufipennis*)

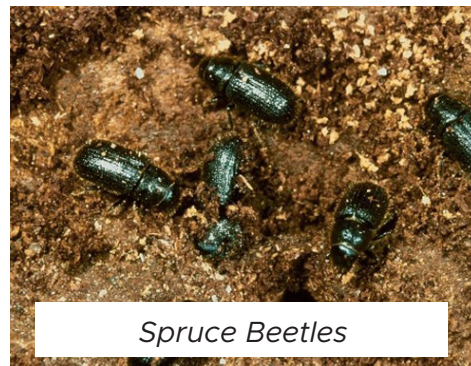
What is a spruce beetle (*Dendroctonus rufipennis*)?

Small (4-7mm long), stout-bodied beetles that range in colour from reddish-brown to black.

Target large diameter, mature spruce trees.

Primary hosts include White Spruce and Engelmann Spruce.

Two-year life cycle with attacks occurring in May to early June. Outbreaks last 2-5 years.



Spruce Beetles

DAMAGE

Capable of killing trees when outbreak populations are high, with tree mortality rates reaching up to 90% with severe infestations.

Beetles burrow under bark to create egg galleries (6-23 cm long) characterized by straight lines.

Beetles introduce blue-stain fungi which disrupts water and nutrient transport within tree.

Also causes needle discolouration, turning from green to yellow to red/brown.



Beetle galleries

CONTROL

Management focuses on reducing beetle populations through prevention, early detection, and sanitation:

- Surveying mature spruce stands near areas of blowdown, logging slash, or dead/stressed trees
- Removal of infested trees before beetles emerge and fly (early May to June).
- Sanitation logging of infested stands where trees are cut, removed, and potentially burned.
- Monitor healthy trees for signs of infestations.



Dead trees after infestation

*Photos courtesy of Toso Bozic,
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