



# PEST REPORT

Pacific Forestry Centre • 506 West Burnside Road • Victoria, B.C. • V8Z 1M5

FIDS Pest Report 93-23

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## SUMMARY OF FOREST PEST CONDITIONS IN THE CARIBOO FOREST REGION

R.D. Erickson  
Forest and Disease Survey

This report is an overview of the major forest pests, active in the Cariboo Forest Region in 1993. More detailed reports will be included in the "Forest Insect and Disease Conditions, Cariboo Forest Region, 1993", available later in the year.

The most damaging pest was *Douglas-fir beetle*, which killed mature Douglas-fir over about 2 500 ha, similar to 1992. Infestations expanded as predicted mainly in the Williams Lake and Bella Coola districts and in the Chilcotin Military Block north of Riske Creek, which contained about half of the total beetle infested area in the Region. *Western spruce budworm* in the Clinton area, lightly defoliated stands over 130 ha near Kelly Lake, west of Clinton. The cool damp weather slowed larval activity preventing widespread defoliation.

The area of lodgepole pine killed by *mountain pine beetle* increased to more than 300 ha, up from 265 ha in 330 separate infestations last year. New infestations were mapped and previous areas increased from Quesnel south to Clinton in the Narcosli, Gaspard, Horsefly and 100 Mile House areas. Maps of locations and areas will be available later, after aerial surveys by BCFS are completed. *Pine engraver beetle* killed pockets of 5-40 mature lodgepole pine along the perimeter of cutblocks near Merston Creek southwest of Quesnel. Populations had expanded in logging slash and stumps, and killed adjacent standing trees.

*Western hemlock looper* populations in mature and overmature western hemlock and western red cedar, collapse overall. Defoliation was moderate over 200 ha near Bowron Provincial Park, down from 21 420 ha in 1992. Most larvae collected for rearing, died from disease.

Immature *Two-year-cycle spruce budworm* populations remained high, but there was no visible defoliation. Engelmann spruce and alpine fir were lightly and moderately defoliated over 160 000 ha last year.

Two-year old foliage of most lodgepole pine was infected and discolored by *pine needle cast* over about 87 000 ha from 100 Mile House to Clinton and east to Sheridan Lake, up from 1000 ha in the same area last year. Similar widespread infection and defoliation occurred mainly in the Chilcotin from 1981-85, causing growth reduction especially in the younger trees.

Trembling aspen were moderately and severely defoliated by *forest tent caterpillar* over 43 000 ha from Horsefly to Quesnel, up from 26 000 ha last year. Large numbers of larvae completely stripped most of the aspen by the first part of June. Some stands partially refoliated but fewer than in 1992.

Infection and mortality of newly planted Engelmann spruce and lodgepole pine seedlings caused by *Rhizina root disease* infection ranged up to 14% near Cariboo Lake, in recently-burned, high elevation (1400 m) cutblocks. This was similar to 1992 when some areas necessitated replanting.

Leader mortality by Engelmann spruce and lodgepole pine terminals by *weevils* increased in 1993, due to a warmer than usual winter. *Spruce weevil* killed an average 20-45% of spruce leaders, mainly in the ICH bio-geoclimatic zone in the Cariboo. *Pine terminal weevil* damage ranged from 6-30% of terminals currently attacked in 2-4 m high lodgepole pine, mainly in the Chilcotin.

Assessments at Bio-monitoring plots east of Quesnel, west of Williams Lake, and east of Chasm indicated no effects to date on plants, from acid rain. *Pinewood nematode* studies near Horsefly continued to assess its presence, and impact on a Canadian boycott of lumber by the European Economic Community. Bolts of western hemlock and lodgepole pine were set out in areas of active woodborers to be assessed and tested for the nematode.

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