



# PEST REPORT

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FIDS Pest Report 93-20

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## SUMMARY OF PEST CONDITIONS IN THE PRINCE GEORGE FOREST REGION

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This summary is an overview of some major forest pests active in the Prince George Forest Region up to early August. Not included in this report are the bark beetle infestations in the Prince George, Mackenzie and Dawson Creek forest districts; this information will be available from the BCFS at a later date. Regional maps produced by FIDS GIS computer and showing all insect infestations included in this report have been sent to BCFS regional office. Additional copies are available from Pacific Forestry Centre in Victoria. A more detailed report on these and other pests, their impacts, and some forecasts will be available later in the year. Pest data were obtained from aerial surveys, pest of young stand surveys and annual pest detection examinations.

Defoliation of mainly old growth western hemlock and red cedar by the **western hemlock looper** increased to over 43 000 ha, up from 28 000 ha in 1992. Defoliation was severe on 37 000 ha, moderate on 5 000 ha and light on 1 000 ha. Two-thirds of the defoliation occurred in the Prince George Forest District with the remainder in the McBride Forest District.

**Eastern spruce budworm** defoliation of white spruce and alpine fir increased over 20% to 170 000 ha after two years of decline. Light defoliation occurred over 135 000 ha and moderate over 35 000 ha. In the Fort Nelson District defoliation was mapped over 164 000 ha from Fort Nelson to the Northwest Territories. Light defoliation was recorded over 6 000 ha in the Fort St. John Forest District along the Fort Nelson and Fontas rivers.

Feeding by the **two-year-cycle spruce budworm** defoliated spruce-balsam stands over 97 000 ha of mostly light defoliation. Approximately 46 000 ha was recorded in the Mackenzie Forest District from Kloch Lake in the south to Ferriston Creek in the north. In the Fort St. James Forest District over 51 000 ha of damage was mapped from Germansen Landing in the southwest to the Ospika River drainage in the northeast.



**Forest tent caterpillar**, defoliated mainly trembling aspen over approximately 40 000 ha, almost double the area attacked in 1992. Populations increased in the Prince George Forest District after two consecutive years of decrease, defoliating aspen over almost 22 000 ha from Prince George to Quesnel. In the McBride Forest District the area of damage increased for the third consecutive year to over 16 000 ha of moderate and severe defoliation. The largest areas of feeding occurred in the Dunster and Croydon areas with over 9 000 ha of severe defoliation. Defoliation by the caterpillar was also noted in the Dawson Creek Forest District with several hundred hectares reported south of Taylor.

The **large aspen tortrix** defoliated deciduous trees and shrubs over approximately 6 000 ha in the Vanderhoof and Mackenzie forest districts. The area of defoliation decreased to 3100 ha in the Mackenzie Forest District down from over 24 000 in 1992. In the Vanderhoof area feeding was noted for the first time in several years over an estimated 2 500-3 000 ha. These infestations were not aerially mapped, but large scattered areas of feeding were noted from just east of Vanderhoof to Fraser Lake.

**Scattered alpine fir tree mortality** was noted throughout the Prince George Forest District in 1993. Single trees and small groups of up to 20 dead trees of all age classes have been recorded from Stoner north to Bear Lake. All trees assessed had been attacked by secondary bark beetles, the most common being *Pityokteines* sp. and *Cerambycidae*, both of which attack dead, dying and injured trees. The most plausible cause of mortality of these trees is the drought conditions that prevailed in the Prince George area during the growing season, May to August, of 1992.

**Mountain pine beetle** killed lodgepole pine over almost 6 800 ha in the Fort St. James and McBride forest districts down from 8 300 ha in 1992. The decrease in area occurred in the Fort St. James District with 6 500 ha recorded in over 167 infestations. Infestations were mapped again in approximately the same locations as 1992, north shore of Trembleur Lake, Northwest arm of Takla Lake, Lovell Cove, Bear Lake and the Sustut River. The area of infestation doubled in the McBride Forest District to almost 300 ha where infestations remained mostly along McNaughton Lake.

Mortality of **Douglas-fir** trees caused by the **Douglas-fir beetle** doubled to 3 400 ha in the Fort St. James and McBride forest districts. The majority of the increase occurred along the southside of Stuart Lake from Fort St. James to Nancut. In the McBride District areas of attack occurred mainly along both sides of McNaughton Lake from Valemount south to the district boundary.

**Balsam bark beetle**, killed alpine fir over 27 500 ha in the Fort St. James and McBride forest districts. In the Fort St. James District mortality was noted over 25 000 ha down from over 35 000 ha in 1992. The area of dead trees doubled in the McBride District to over 2 400 ha.

The area of **spruce beetle** attack decreased by half to 1 200 ha in the Fort St. James Forest District but increased to 150 ha from 40 ha in the McBride Forest District. More than 600 ha were mapped just south of Inzana Lake in seven infestations. No recently dead trees were noted in the Fort Nelson Forest District but old dead spruce beetle killed trees were lightly scattered over more than 2 000 ha near Kotcho Lake.

Attacks by the **spruce weevil** were noted at varying levels throughout the Prince George Forest Region. This was the first year of an annual spruce weevil monitoring program that will assess fluctuations of weevil attacks in spruce stands in several biogeoclimatic zones and subzones. Surveys will be completed by the end of September.

Populations of **poplar-willow-borer** increased this year attacking willow and poplar throughout the host range.

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