

PEST REPORT

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

Pest Report 91-17

September 1991

SUMMARY OF FOREST PEST CONDITIONS CARIBOO FOREST REGION, 1991

R.D. Erickson Forest Insect and Disease Survey

The following report summarizes the forest pest conditions in the Cariboo Forest Region, based on the summer survey conducted by FIDS up to late August. The areas of infestations are presently estimated, with data compilation in full by October 25.

With a reduction of current attack, the area containing mature Douglas-fir killed by Douglas-fir beetle is expected to decline. The highest number of recently killed standing trees and some windthrow was again in the DND Block at Riske Creek, and in some of the drainages along the Fraser River. Infestations were less common in the Williams Lake area than in 1990. New infestations were recorded along the Homathko River Valley and at Mosley Creek, where populations increased in 1989 in Douglas-fir damaged by a wildfire. Current attack was high and threaten remaining susceptible, but largely inaccessible stands.

Spruce beetle populations continued at low endemic levels. In initial surveys in the northeastern part of Bowron Provincial Park, about half of the trees examined, mostly windfall, contained an average of only one gallery per 900 cm². About half the lethal trap trees set out along Isaac Lake were lightly attacked and contained no live broods. Outside the park near Barkerville and the regional boundary fewer than 40 pockets of recent beetle-killed trees were recorded, down slightly from 44 totaling 85 ha in 1990.

The number of mountain pine beetle infestations in the Chilko Lake area declined to fewer than the 155 mapped over 315 ha last year. However, new pockets of up to 15 recently killed trees in mixed lodgepole pine and Douglas-fir stands were mapped in widely scattered groups east of Williams Lake to Horsefly. Most pockets contained new attacks with the potential to expand in 1992.

Immature two-year-cycle spruce budworm larvae lightly defoliated new foliage of mature spruce and alpine fir near Barkerville, in the Willow River drainage, on the north side of Quesnel Lake, and along Grain Creek. Understory immature alpine fir were severely defoliated in some areas. The area defoliated is less than 7000 ha, half that defoliated by mature larvae in the same general areas last year.

Western hemlock and western red cedar on the Lynx Peninsula on Quesnel Lake were lightly to severely defoliated by western hemlock looper, where stands were defoliated over 20 ha last year. The area of defoliation expanded to stands on the east arm of Quesnel Lake from near Hen Ingram Lake between Horsefly and Quesnel lakes, to Wells Gray Provincial Park on the eastern boundary of the region. Standard FIDS larval samples in the area also contained high numbers of filament bearer, <u>Ectropis crepuscularia</u> and rusty tussock moth, <u>Orgyia antiqua badia</u>. Rusty tussock moth populations increased in the north and east arms of Quesnel Lake causing light defoliation of recently planted pine and spruce seedlings, and severe defoliation of deciduous shrubs especially thimbleberry in logged areas.

Forest tent caterpillar populations increased in the eastern part of the region and severely defoliated aspen and poplar in patches from Bridge Lake north to Canim Lake, between Quesnel and Horsefly lakes, from Horsefly to Williams Lake, and south-east of Quesnel along the Quesnel River. The amount of disease present in some populations is being assessed. For the third consecutive year, 80% of the aspen foliage in several 0.25-1 ha patches along the Fraser River Valley near Macalister north of Williams Lake, was damaged by the birch-aspen leaf roller.

Climatic damage was again widespread throughout the region, similar to 1990. Numerous buds were killed, mainly on Douglas-fir and some Englemann spruce, and in some cases trees were killed in small patches. Younger trees were most severely damaged and some trees 15 m high also had all of the buds killed. There was some late bud flushing, some of which were deformed. Several patches west of Lac La Hache near Helena Lake contained more than 100 dead immature trees. Damage to roadside conifers from salt spray and seepage continued at about the same level as last year. About 46 patches of 5-40 damaged trees were recorded along Highway 97 from Williams Lake to Quesnel, 34 patches from Williams Lake to Bella Coola along Highway 20, and 47 from Williams Lake to Clinton along Highway 97.

Damage to conifers by squirrels, and voles, was widespread throughout the region. Numerous 0.15 - 0.25 ha patches of immature lodgepole pine with 2-25 flagged branches per tree caused by squirrel feeding, were common along roadsides. Voles destroyed recently planted seedlings, enough to require replanting, near Kimsquit in the Bella Coola district and near Leeches Lake west of Williams Lake.

Infection of year-old pine foliage by elytroderma needle disease and lophodermella needle cast was common, widespread, and severe for the second consecutive year. Infections were common on ponderosa pine throughout the host range in the Clinton area and near Loon Lake, and on lodgepole pine over more widespread areas than in 1990, mainly in the Clinton area and near Alexis Creek.

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