



PEST REPORT

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

FIDS Pest Report 92-24

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SUMMARY OF FOREST PEST CONDITIONS IN THE CARIBOO FOREST REGION

R.D. Erickson
Forest Insect and Disease Survey

The following report is a summary of major forest pest conditions in the region, based on surveys conducted by FIDS, up to late August.

Bark beetles were the most significant forest pests in the region and included the following:

The area of mature Douglas-fir killed by Douglas-fir beetle is about 1750 ha, similar to 1991. In the DND Block at Riske Creek, the area expanded 10% to 380 ha. Elsewhere, patches of dead Douglas-fir were common in drier areas along the Fraser River and in the IDF biogeoclimatic zone. Many newly attacked trees turned red this year, which normally occurs the year following new attacks. Populations are likely to continue in 1993.

Mountain pine beetle decreased slightly overall to about 300 ha particularly at Chilko Lake; however, new infestations were mapped east of Highway 97 from Quesnel to 100 Mile House in mixed lodgepole pine and Douglas-fir stands. Current attack indicates high populations in 1993.

Spruce beetle was endemic in Bowron Provincial Park, where only 12 strip-attacked trees were found. Populations outside the park in the Barkerville and Willow River areas were also endemic. The trees in the park were near Lindgren traps placed throughout the 1990 blowdown, which is no longer attractive to beetle populations. About 15 healthy standing trees in the same area were killed by increased numbers of northern engraver beetle, Ips perturbatus. This beetle increased in the blowdown and later attacked and killed the upper crowns of standing trees.

Defoliator pests were more widespread and damaging and included the following:

Increased mature two-year cycle spruce budworm lightly and moderately defoliated mature spruce and alpine fir stands over 159 600 ha. This was up tenfold with light defoliation over 145 200 ha and moderate over the remainder. Most was from the Willow River area north of Barkerville to near Mahood Lake,

east of 100 Mile House. In some areas lodgepole pine was also defoliated when adjacent to defoliated spruce and alpine fir. A forecast of population trends for 1993 will be available later, based on egg mass surveys in September.

Western hemlock looper increased significantly and moderately and severely defoliated western hemlock and western red cedar over 22 730 ha in large patches near Quesnel Lake. This was a fourfold increase and the third consecutive year of infestation in some areas. Defoliation was severe over 18 800 ha and moderate over the remainder from Matthew River near the North Arm of Quesnel Lake, down the lake to Lynx Peninsula and east to Wells Gray Provincial Park. A forecast of population trends for 1993 will be available later in September, when stands will be surveyed to also determine any tree mortality.

The most damaging pest of deciduous forests was Forest tent caterpillar which moderately and severely defoliated poplar over 25 020 ha in the eastern part of the region. Defoliation was severe over 22 200 ha, moderate over 2030 ha and light over the remainder. Most occurred in 146 separate patches from Bridge Lake north to Canim Lake, between Quesnel and Horsefly lakes, and from Horsefly to Williams Lake. Infestations in the Quesnel area declined slightly due to virus, disease, and parasitism.

Black army cutworm severely defoliated herbaceous growth over 40 ha, but caused little damage to newly planted conifers, at Hotfish Lake east of 100 Mile House. Rusty tussock moth lightly to severely defoliated seedlings and deciduous shrubs, especially thimbleberry in logged areas along the north and east arms of Quesnel Lake.

Surveys of 22 young stands, 15 years old or younger treated under FRDA I, found the most common damage was caused by terminal weevils, pine needle blights and rusts, and mammals.

Infection of new and year-old pine foliage by needle disease fungi continued at high levels, similar to the last two years. Ponderosa pine was severely infected by Elytroderma needle disease throughout the host range near Clinton and Loon Lake. Pine needle cast fungi lightly to moderately infected and discolored most year-old needles on lodgepole pine from the Chilcotin to Clinton and east to Canim Lake. Preliminary surveys indicate increment loss on severely affected trees.

There were no adult male gypsy moths caught by August 15th in 27 sticky traps placed in 21 Provincial parks, campgrounds and highway rest areas in the region.

Additional special surveys included the establishment of two long-term monitoring plots for acid rain, in addition to one established in 1987 east of Quesnel, where surveys this year found no evidence of damage attributable to acid rain. Throughout the southern part of the region, damage to groups of roadside conifers from salt spray and seepage was less common and widespread throughout the southern part of the region, than in previous years.

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