Oct. [3]



## **PEST REPORT**

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



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

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This report provides a brief overview of forest pest conditions in the Nelson Forest Region up to late August, 1990. More comprehensive results, including predictions for pest levels in 1991, will be distributed later this year following analysis of field data.

Mountain pine beetle infestations declined overall to about 23 000 ha from 31 000 ha in 1989. However, increases occurred in the Rocky Mountain Trench, south of Cranbrook, along the lower Elk, Wigwam and Bull rivers, in the Moyie Lake and Moyie River areas, and along Horsethief Creek. Major beetle population decreases occurred in the East Kootenay, south of Elko in the Galtons and in higher elevation (1400 m) infestations south of Cranbrook. In the West Kootenay, infestations declined in the Boundary TSA, including Ingram, Wallace and Eholt creek drainages, and between Granby River and Christina Lake. Infestations increased slightly in the northern part of the Boundary TSA, especially at and north of Hellroarer Creek. Pine needle sheathminer populations declined near Grand Forks where lodgepole pine in three patches totaling 415 ha were defoliated in 1989. There was no evidence of pinewood nematode in more than 50 samples collected in the Region in 1990, from insect-damaged or stressed true fir, western hemlock, cedar, and Douglas-fir trees, and potential vectors.

Douglas—fir beetle killed trees in more than 150 separate areas totaling 65 ha, mostly in the East Kootenay, down from 290 ha in 1989. However, tree mortality remained relatively unchanged from 1989 in larger infestations at Wickman, Wildhorse and Findlay creeks, and at Nixon Creek along McNaughton Lake. Beetle populations generally subsided in the smaller pockets where less than 20 trees were recorded in 1989. The number of infestations increased slightly in the West Kootenay near Beaverdell to 4 ha from 1 ha in 1989. Defoliation of Douglas—fir by western spruce budworm, mostly in the southwest corner of the Region with 200 ha west of Revelstoke, was light over 1160 ha, down significant—ly from 17 600 ha in 1989.

Grand fir were killed by fir engraver in about 25 pockets totaling about 240 ha in the Pend-d'Oreille area and along the east side of Kootenay Lake, similar to 1989.

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In the first year of visible damage, western hemlock looper lightly defoliated western hemlock over 1225 ha in 16 patches north of Revelstoke in the Bigmouth Creek drainage and at the mouth of Downey Creek. Defoliation suspected to be in the Albert Creek area will be surveyed later in the Fall.

Black army cutworm populations in the northern part of the Region declined for the second consecutive year. Ground cover was defoliated over about 20 ha at one site north of Bush Arm, but there was no apparent damage to recently planted western larch seedlings.

Root rot surveys in the East Kootenay found blackstain root disease was common, often in association with Armillaria root disease, in spaced young lodgepole pine. Data were also collected on the increased incidence of root rot following the collapse of a mountain pine beetle infestation.

Foliage diseases on pines and western larch were more widespread and often more intense than in recent years. Infection of year-old lodgepole pine needles by the Lophodermella needle cast was most prominent in the East Kootenay throughout the southern portion of the district. In the West Kootenay, Meria needle cast moderately and severely discolored western larch in more than 110 separate areas over more than 5550 ha.

Forest tent caterpillar defoliated aspen and some cottonwood over about 4315 ha in the East Kootenay, down from 9900 ha in 1989. Defoliation was more severe south of Golden near Parsons and Brisco, but declined to generally light to moderate in the Golden and Blaeberry River areas, and to trace and light near Wasa and Fort Steele.

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