PEST REPORT

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INCREASE OF WESTERN SPRUCE BUDWORM IN INTERIOR BRITISH COLUMBIA

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Infestations of the budworm, Choristoneura occidentalis on Douglas-fir, which extended over 17 000 ha in the Cariboo, Kamloops, and Nelson regions in 1982, continue in 1983 and are expected to intensify and expand. Defoliation is expected to continue until larvae pupate about late June to early July.

In the Cariboo Region, defoliation is expected to intensify in the Clinton area, with some mortality of immature trees. Moderate to severe defoliation of current growth is expected along Hart Ridge, Highway 97, and Big Bar Lake road junction; Loon Lake and Loon Creek and Tsilsalt Ridge to Three Mile Lake areas where 150 to 400 or more larvae were collected in standard beating samples. Douglas-fir tussock moth larvae were also common with C. occidentalis south of Clinton along Highway 97 and will contribute to the predicted severe defoliation. Light to moderate defoliation is predicted (5 to 50 larvae were collected per sample) between Loon Lake and the Bonaparte River and along the river to near Fly Creek and north of Clinton on south-facing slopes. Populations have been near or at epidemic levels in the Clinton area since 1977 and covered 2 800 ha in 1982.

Persistent in Douglas-fir stands in the Spences Bridge-Ashcroft-Cache Creek-Savona areas of the Kamloops Forest Region since 1976, defoliation is expected to continue at similar levels in 1983 and to expand into previously nondefoliated stands north and south of Kamloops Lake. Up to 110 third to fourth instar larvae per standard beating sample were collected between Oregon Jack Creek and Venables Lake. Douglas-fir

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tussock moth is also epidemic in the budworm-defoliated areas. The budworm defoliated 14 000 ha in 1982, and continuous years of defoliation has resulted in growth loss and top-kill.

In the Nelson Region, about 1 000 ha of Douglas-fir forests were lightly defoliated in 1982 in the Bridesville, Johnston Creek, and Rock Creek areas. Increased defoliation intensities and expanded area are expected in the current infestation. As in the other active budworm outbreaks in the province, Douglas-fir tussock moth is also present in localized, lower elevation stands.

The budworm populations in the Fraser Canyon area of the Vancouver Region remain very low, with a maximum of only two larvae per standard beating sample.

More detailed reports on the status of the budworm outbreaks will be provided following completion of aerial surveys, egg counts, and pheromone trap analysis.

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[1] Forest Insect and Disease Survey Rangers