Carrada 1987 May レイ

Government of Canada

Gouvernement du Canada

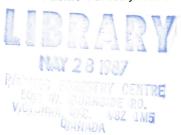
Canadian Forestry Service

Service canadien des foréts

Lilirary

## PEST REPOR'

Pacific Forestry Centre ● 506 West Burnside Rd. ● Victoria, B.C. ● V8Z 1M5



May, 1987

Predicted Defoliation of Douglas-fir by Western Spruce Budworm in the Kamloops Region in 1987 based on Egg Masses and Overwintering Larvae

> R.D. Erickson & C. Wood Forest Insect and Disease Survey

Data from egg masses sampled in late 1986 at or near 39 budworm defoliated stands and, for the first time, from overwintering second instar larvae (L2) at 12 of the 39 sites, sampled in early 1987, indicate continuing but variable intensities of defoliation at all locations in 1987 (Table).

The late winter larval sampling, completed on a trial basis, was based on systems implemented in eastern Canada and the United States. Two branches from each of 3 trees per location were soaked in a caustic solution, then washed and larvae collected on filter papers. Comparison of data from the larval samples and egg mass samples showed considerable variation but predicted defoliation based on larvae is generally lighter than predictions based on egg mass data.

The sampling method study will continue in 1987-88 in order to provide more accurate forecasting of defoliation intensities in western spruce budworm outbreaks, and to determine which method produces more reliable results.

Table. Predicted defoliation of Douglas-fir by western spruce budworm based on the average number of second instar larvae per 75cm branch and average number of egg masses per branch.

Location	Avg. number of larvae per 75 cm branch	Predicted 1987 defoliation	
		o/w larvae	egg masses
Adams River	1	light	severe
Sabiston Cr.	1	11	11
Scottie Cr.	3	11	75
Cache Cr.	6	11	11
Paul L.	6	H .	11
Orchard L.	8	moderate	moderate
Louis Cr.	11	11	severe
Indian Gardens	13	11	18
Falkland	19	Ħ	10
Ducks Meadow	20	II	98
Oregon-Jack Cr	26	high	moderate
Highland Valley		11	severe

Approximate thresholds based on eastern spruce budworm:

low : 1-6 larvae per 75cm br. moderate : 7-20 " " " " " high : 21-40 " " " " " " severe : 41+ " " " " "