June

PEST REPORT

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

June 1990



Two-year-cycle Spruce Budworm in the Prince George and Quesnel Forest Districts

R.L. Ferris, Forest Insect and Disease Survey

The two-year cycle spruce budworm Choristoneura biennis is defoliating alpine fir and white spruce in the Bowron and Willow river drainages. Infested bud counts at six locations in the Prince George Forest District predict light defoliation in 1990 at all except one location of moderate. Four surveys in the Quesnel Forest District also predict light defoliation at all except one location of moderate (Table 1). Aerial surveys in August will determine the extent and locations of defoliation. In 1988, the last major feeding year, over 17 500 ha were defoliated and similar defoliation is expected in 1990.

Location	Percent buds infested	Predicted defoliation ¹
Prince George Forest Dis	trict	
68 km Bowron Rd.	6	light
76 km Bowron Rd.	10	light
12 Tumuch Rd.	4	light
Everett Cr.	11	light
Rond Cr.	10	light
Stephen L.	17	moderate
Quesnel Forest District		
Willow R.	15	light
Paput Cr.	8	light
Tregillus Cr.	25	. moderate
Nine Mile L.	5	light

¹1-15, light; 16-30, moderate; 31+, severe.

Defoliation has been recorded periodically in this area since 1914, with 800 000 ha defoliated in 1962. Up to 10% top-kill can occur with extended severe defoliation but mortality is usually limited to understory trees. most important problem caused by the budworm is increment loss. Damage appraisal plots near Babine Lake had a 76% increment loss due to severe budworm defoliation in a study done in 1961.

Control has been limited to disease, parasitism and weather. Chemical control programs have not been used against the two-year-cycle spruce budworm in British Columbia.
