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PEST REPORT

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TWO-YEAR CYCLE SPRUCE BUDWORM IN THE PRINCE GEORGE AND CARIBOO FOREST REGIONS

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The number of immature 2-year spruce budworm Choristoneura biennis larvae in new buds of alpine fir and white spruce in the Bowron and Willow river drainages have declined overall. This is based on an average of 20% of the buds infested at 12 locations, down from 31% in 1989. However, populations are numerous enough to defoliate stands in 1992 when they mature (Table); defoliation is not expected to occur this year.

Twenty buds from each of five trees were examined at six locations in the Prince George Forest District and six in the Quesnel Forest District

Table. Percent of alpine fir and white spruce buds infested by immature 2-year-cycle budworm larvae and predicted defoliation by mature larvae in 1992 in the Prince George and Quesnel forest districts.

Location	Percent buds infested by immature larvae	Predicted defoliation ¹ in 1992 by mature larvae
<u>Prince George Forest District</u>		
68 km Bowron R.	10	light
76 km Bowron R.	6	light
12 km Tumuch R.	6	light
Everett Cr.	11	light
Rond Cr.	17	moderate
Stephen L.	21	moderate
Average	12	light

Location	Percent buds infested by immature larvae	Predicted defoliation ¹ in 1992 by mature larvae
<u>Quesnel Forest District</u>		
Pundata Cr.	23	moderate
Four Mile L.	55	severe
Pleasant Valley	43	severe
Antlers Cr.	21	moderate
Upper Willow R.	21	moderate
Barkerville	5	light
Average	28	moderate
AVERAGE	20	MODERATE

1/ 1-15% buds infested = light defoliation
16-30% = moderate defoliation
31%+ = severe defoliation

Defoliation has been recorded periodically in these areas. Successive years of severe defoliation can result in increment loss, top-kill and occasionally mortality of understory trees.

Surveys will continue to monitor populations and assess disease and parasite levels, and to further determine population trends for 1992.

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