



PEST REPORT

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

Pest Report 91-7

August 1991

WESTERN HEMLOCK LOOPER INFESTATIONS IN THE CLEARWATER FOREST DISTRICT KAMLOOPS FOREST REGION, 1991

H. P. Koot
Forest Insect and Disease Survey

Populations of western hemlock looper, Lambdina fiscellaria lugubrosa, increased dramatically this summer and defoliated primarily western hemlock in mature and overmature hemlock-cedar stands over more than 33 000 ha in the North Thompson and Adams rivers drainages and in Wells Gray Park. This is the first outbreak in the Region since 1984 when defoliation covered about 8 000 ha, and followed increased larval populations in 1990.

The most severe defoliation, as detected during joint B.C. Forest Service - Forestry Canada aerial surveys in early August, occurred on 3 650 ha from Blue River to the Albreda River, near Tuntum Lake in the Adams River drainage and along Hobson Lake in Wells Gray Park. Most trees were at least fifty percent defoliated, with the tops and many branches completely stripped. Some top-kill and tree mortality can be expected.

Moderate defoliation occurred on more than 15 000 ha in these same areas and in the upper Adams and North Thompson river drainages and near Messiter Summit. Light defoliation occurred south of Tuntum Lake along the Adams River, Oliver and Gold creeks, at Gollen Creek near Adams Lake, and near areas moderately or severely defoliated.

Outbreaks in the Interior have generally been recorded at intervals of eight to nine years, and have lasted two or three years before collapsing due to adverse weather or other natural controls such as parasites, predators, and diseases.

Samples of old man's beard lichen will be obtained from representative areas this fall to determine the number and viability of overwintering eggs and help forecast damage trends in 1992.

LIBRARY

.../2

AUG 28 1991

FORESTRY CANADA —
PACIFIC & YUKON REGION
506 W. BURNSIDE RD.
VICTORIA, B.C. V8Z 1M5 CANADA

Table - Location and area of hemlock-cedar stands defoliated by western hemlock looper, Clearwater District, 1991

Location	Area of Defoliation (ha)		
	Light	Moderate	Severe
<u>Wells Gray Park</u>			
Hobson Lake - Goat Cr.	1 490	2 160	1 220
Clearwater River	40		
Azure Lake	360		
<u>North Thompson River Drainage</u>			
Blue R. - Albreda R. - Adolph Cr.	9 160	9 350	2 200
Messiter - Cottonwood Flats	40	120	
<u>Adams River Drainage</u>			
Tumtum L. - Upper Adams R.	905	3 600	230
Oliver Cr.	650		
Gold Cr.	240		
Sunset Cr. - Tumtum L.	980		
Gollen Creek	280		
Total = 33 025 ha	14 145	15 230	3 650

Light - discolored foliage barely visible from the air, some upper crown and branch tip defoliation.

Moderate - pronounced discoloration and noticeably thin foliage; top third of many trees severely defoliated, some completely stripped.

Severe - top, plus many branches 100% defoliated; most trees 50% defoliated.

* * * * *