

Prince George District 1974



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Forest Insect & Disease Conditions

PRINCE GEORGE DISTRICT

(summer addresses)

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IMPORTANT NOTICE

Pests and damage at low levels and of minor consequence are not mentioned herein, but the data on these and additional details on the important pests are recorded and preserved in the form of File Reports. Such reports, and those relative to other districts in the Pacific Region, are available on request by contacting:

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FOREST INSECT AND DISEASE CONDITIONS 1974

PRINCE GEORGE DISTRICT

by



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Survey Rangers

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INTRODUCTION

Unlike the other forest districts in British Columbia, which experienced one or more major forest pest problems, the Prince George Forest District was relatively free of significant forest pest damage in 1974. The unusually cool and wet period in June and July probably was responsible for a low incidence of insect pests.

Minor infestations of foliage insects caused light to moderate defoliation in scattered localities. One-year-cycle spruce budworm was again active in the Liard area, while the forest tent caterpillar in trembling aspen stands subsided in the infestations east and south of Prince George. Black army cutworm infestations were active in some plantations but caused no significant damage to the conifer seedlings. Blackheaded budworms increased in the spruce-balsam forests. Bark beetles persisted at low population levels.

Unfavorable weather caused red belt in some areas between McBride and Yellowhead Pass, and near Canoe River.

British Columbia Forest Service silviculturists, planting crews and ranger personnel, co-operated greatly in reporting black army cutworm and pine needle miner infestations.

TENT CATERPILLAR DECLINES

Forest tent caterpillar infestations declined substantially in 1974, especially in the Hixon - Strathnaver area. Moderate to heavy defoliation occurred in scattered patches in the Prince George area and between McBride and Yellowhead Pass. A virus, and wet, cold conditions during May, apparently caused the decline.

BLACK ARMY CUTWORM SUBSIDES

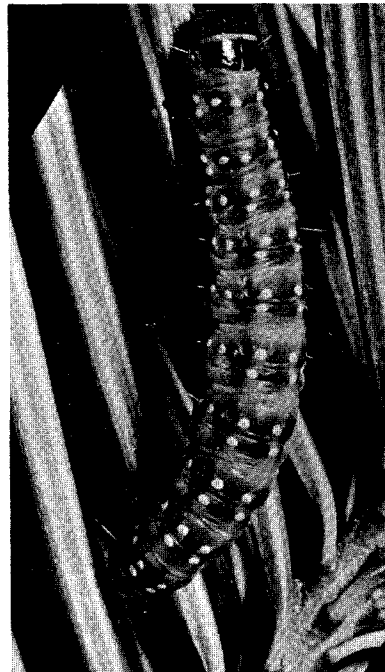
New minor infestations of black army cutworm appeared at Purden Mountain, Carpet Lake road and Ptarmigan Creek. Larvae were plentiful in each area, but an ample supply of ground cover plants such as raspberry, thimbleberry and fireweed provided a more than adequate food supply so that lodgepole pine and white spruce seedlings were relatively untouched by cutworm larvae. The 1973 outbreak areas at Bearcub, Naver and Horsey creeks contained few larvae.

Pupal counts taken in August 1974 at Carpet Lake road and Ptarmigan Creek averaged 1.4 and 1.9 pupae per square foot duff sample, indicating a light population for 1975.

SPRUCE BUDWORM DECLINES

Spruce budworm larvae lightly defoliated white spruce in the Liard River valley between Fireside and Liard Hotsprings. The cold, wet May and June appeared to hamper insect development, so preventing the heavier defoliation which had been evident throughout the same area in 1973.

Moderate populations will likely persist, with some increase in 1975.

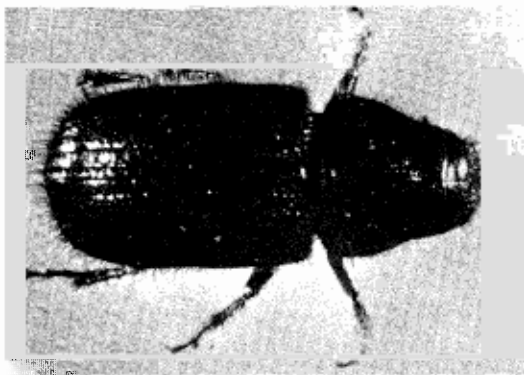


TWO-YEAR-CYCLE SPRUCE BUDWORM larval populations remained light in 1974. Traps baited with a sex attractant were again used to assess the adult population. Trapping indicated a pronounced increase in the number of male moths, particularly at George Creek, Hay Lake, Narrow Lake and Pine Pass. The increase from an average of two in 1972 to an average of 22 moths per trap in 1974 indicates an upward trend in spruce budworm populations. However, little defoliation will be apparent in 1975, the non-flight year, when larvae go into hibernation before they are half grown.

BLACKHEADED BUDWORM larval numbers quadrupled and lightly defoliated alpine fir in the McLeod Lake to Pine Pass area. The population dropped in the vicinity of Tumuch Lake. The highest larval numbers were at Kerry Lake, Whiskers Point and Pine Pass. Blackheaded budworm populations will probably increase and cause light defoliation in 1975.

The blackheaded budworm has not been known to cause serious damage to forests in the Prince George District.

SPRUCE BEETLE populations persisted at an endemic level, with no evidence of any population build-up other than a minor increase in the numbers of larvae in windfall in the Wendle Creek area.



MOUNTAIN PINE BEETLE - No beetle-killed lodgepole pine trees have been recorded in the District since 1972, when a number of 1971 beetle-killed pines were observed in the Punchaw Lake, Takla - Trembleur lakes, Sundown Creek and Canoe River areas.

The Prince George Forest District lies almost entirely in the low to very low hazard rating for mountain pine beetle. However, this bark beetle is currently a problem in the Prince Rupert Forest District as far east as Burns Lake. Early detection with subsequent early management practices can prevent spread and undue losses. Your attention is directed to the recently published Technical Report on "Management of Lodgepole Pine to Reduce Losses from the Mountain Pine Beetle", by L. Safranyik et al., available from the Pacific Forest Research Centre.

LODGEPOLE PINE NEEDLE MINER apparently infested 6,000 acres (2,400 ha) of lodgepole pine on the west side of Williston Lake in the Blackwater Creek area. The report, with substantiating specimens, was received from the British Columbia Forest Service at Mackenzie in October, 1974.

This insect has been known to cause needle loss and some increment reduction.

LEAF BLOTCH MINERS infested and discolored the foliage of white birch from McBride to Yellowhead Pass and from Tete Jaune Cache south to Hugh Allan Creek. The discolored birch foliage contrasted with the red belt of lodgepole pine and weather-damaged trembling aspen trees in the vicinity.

WEATHER DAMAGE

Red belt injury occurred from McBride to Yellowhead Pass and south of Valemount on the Selwyn Range, the Malton Range, and on the Alaska Highway at Mile 170.



The buds and twigs of trembling aspen and willow were damaged by an unseasonably late frost over 3,300 acres (1,350 ha) at 4,000 to 4,500 feet (1,200 to 1,250 m) elevation from McKale Creek to Mount Teare near McBride. Similar damage was found from 6 to 16 miles (10 to 26 km) west of Chetwynd. Most of the aspen trees remained leafless except for a few adventitious buds that flushed during July.

Cytospora sp., a secondary fungus, was found on some of the damaged twigs.

Frost damage was reported on white spruce in the Torpy River Valley near McGregor, where injury of the new foliage extended over several miles.

MORTALITY OF TREMBLING ASPEN - Dead and dying trembling aspen trees were observed on approximately 5 acres (2 ha) on a hillside near Farrel Creek, east of Hudson Hope. A canker disease, *Hypoxyton mammatum*, was isolated from samples taken from the butts of living trees on the edges of the area. The infection had caused the death of a central group of trees, and appeared to be spreading outward.

CURRENT STATUS OF FOREST PESTS IN PACIFIC REGION

P E S T	D I S T R I C T S		
	PRINCE RUPERT	PRINCE GEORGE	VANCOUVER
MOUNTAIN PINE BEETLE	epidemic, Houston, Hazelton, Kitwanga	light populations	Klinaklini R, Anderson L and Fraser R
SPRUCE BEETLE	small infestation along Cranberry R	trace at Bowron R and Wendle Cr	not found
DOUGLAS-FIR BEETLE	not found	light at Bear L	scattered light patches on Vancouver Island
WESTERN BLACK- HEADED BUDWORM	epidemic, increased in most areas	moderate increase at Pine Pass and McLeod L	collapsed
SPRUCE BUDWORM, ONE-YEAR-CYCLE	trace at Kitimat	epidemic in Liard R area	epidemic in Lillooet and Fraser valleys
SPRUCE BUDWORM, TWO-YEAR-CYCLE	light popula- tions near Bell-Irving R	light populations	not found
DOUGLAS-FIR TUSSOCK MOTH	not found	not found	not found
WESTERN HEMLOCK LOOPER	light in coastal stands	light, decreased	light populations
FALSE HEMLOCK LOOPER	not found	not found	not found
BLACK ARMY CUTWORM	populations in Interior decreased	localized outbreaks	not found
FOREST TENT CATERPILLAR	common near Kitimat	epidemic east of Prince George	localized in a few areas
LARCH CASEBEARER	not found	not found	not found
DWARF MISTLETOE	widespread on Hw and P1	southern areas on P1	widespread on Hw
WINTER DAMAGE	moderate on Sw in Bulkley Va	McBride, east	extensive on P1 at Klinaklini R

D I S T R I C T S

CARIBOO	KAMLOOPS	NELSON	YUKON
increased on PI at Cariboo L, Riske Cr, Klinaklini R	epidemic in Okanagan Valley	epidemic in E & W Kootenays, 30,000 PI killed	not found
trace at Quesnel L	general collapse	light, few current windfall infested	not found
increased, Fraser R, Meldrum Cr - Dog Cr	light increase in west, scattered occurrence	light, few red-tops recorded in East Kootenay	no host
light population Wingdam	generally light population	increase at Upper Arrow L	trace
Kelly L, light population	epidemic in Lillooet area	increase at Trout L in stands of Hw	trace
epidemic in interior wet belt	moderate defoliation at Lempriere Cr	population collapsed at White R	not found
not found	increased in Kamloops area	trace near Cascade	no host
not found	population increased in North Thompson	collapsed in wet belt forests W Kootenay	not found
not found	outbreaks expanded to 14,000 acres (5,600 ha)	trace near Windermere L	no host
not found	declined, North Thompson	epidemic in Golden area expanded	not found
scattered patches only, Macalister to Quesnel	collapsed in Raft R area	infestation near Golden	not found
no host	light population in Okanagan Va	infestations declined	not found
general on PI in Chilcotin area	severe in localized areas	widespread on PI, Lw	not found
general, 40,000 acres (16,000 ha)	severe in North Thompson Va	Kootenay L from Wynndel to Boswell	light, M.890, Alaska Hwy., Little Salmon L

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BC-X-114