FOREST INSECT AND DISEASE CONDITIONS

Prince George **Forest District** British Columbia, 1975

> S.J. Allen L.S. Under

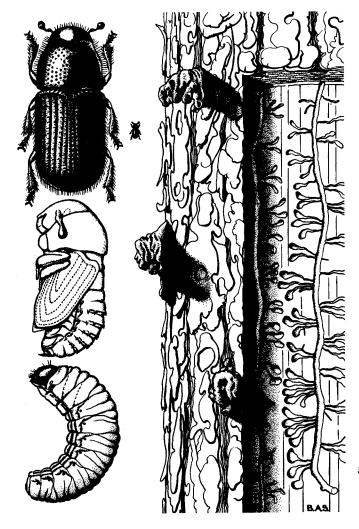
The District was almost free of major pest problems in 1975. For the first time in several years, mountain pine beetle attacked stands in the Stuart-Takla lakes area. Spruce budworm was active in the Liard area, tent caterpillar stripped aspen near McBride, and pine needle sheathminer infested pine near Mackenzie and Endako. Adverse weather caused red belt near Lucerne.

Environment Canada Environnement Canada

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LODGEPOLE PINES, KILLED BY mountain pine beetle, *Dendroctonus ponderosae*, were observed at Whitefish Lake, Nancut, Takla Landing, Takla Lake and at Wedge Mountain. The 1975 beetle flight and attack took place from late July to mid-August. Since the attacked trees will not discolor until mid-summer 1976, the extent of the attack can best be determined at that time.



SPRUCE BUDWORM, Choristoneura fumiferana, populations increased in the Liard River Valley and caused from 30% to 50% defoliation of new growth of white spruce between Fireside and Liard Hotsprings. Spruce budworm has persisted in this area since it was first noted in the Smith River area in 1957. The infestation is expected to continue in 1976.



TWO-YEAR-CYCLE SPRUCE BUDWORM, Choristoneura biennis, remained at low population levels in 1975, a non-flight year. Sectar traps, baited with pheromone sex attractant, caught an increased number of male moths which may have been one-year-cycle budworms from infestations in the north and south parts of the District. The highest numbers of moths were again found at Beaver Creek and Pine Pass, where an average of 31 and 21 moths per trap were caught in the five traps. Significant numbers of male moths averaging 15, 12 and 12 per trap, were caught at Narrow Lake, George Creek and Naver access road, respectively.

BLACKHEADED BUDWORM, Acleris gloverana, populations declined in 1975 causing only light defoliation at Pine Pass. Small numbers of larvae were found on white spruce and alpine fir at Tudyah Lake, Pine Pass, Bowron River, near Spruce Creek, McGregor River and Nelson River. The downward trend in population began in 1974 and will most likely continue.

CONIFER SAWFLIES, *Neodiprion* spp., caused up to 50% defoliation of old foliage of western hemlock trees in the McBride area at Hungary Creek, Ptarmigan Creek, Goat River and Dore River.

haimbachi, infested a 12-year-old lodgepole pine stand on 600 acres (240 ha) in the Blackwater Creek area on the west side of Williston Lake. Defoliation was heavy in 1974 and 1975. The 1974 defoliation resulted in the death of 40% of the terminal shoots. Laterals were replacing the dead terminals in 1975. Near Endako, 50% of the new foliage of lodgepole pine was destroyed by sheathminer feeding.

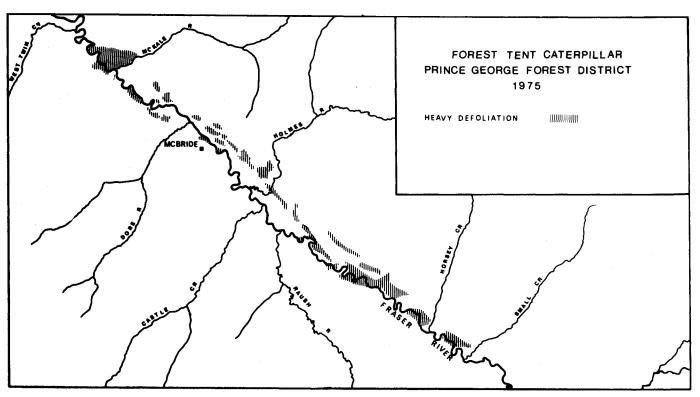
Further defoliation may be expected in these areas in 1976.

FOREST TENT CATERPILLAR, Malacosoma disstria, defoliated trembling aspen stands on 10,000 acres (4,000 ha) in the McBride area between McKale Creek and Horsey Creek. Defoliation was more severe than in 1974 and by June 26, larvae had completely defoliated 50% of the stands.

Aspen stands situated among the low lying farm lands of the Fraser River Valley were over 90% defoliated throughout. Black cottonwood and willow suffered lighter defoliation.

Small outbreaks caused up to 50% defoliation at Miworth and near Mackenzie.







THE PINE NEEDLE SHEATHMINER, Zelleria

SPRUCE BEETLE, Dendroctonus rufipennis, populations remained at endemic levels. A few greenattacked spruce trees were reported in the Naver area. Very few spruce beetle progeny were found in windthrown white spruce throughout the Willow and Bowron River valleys.

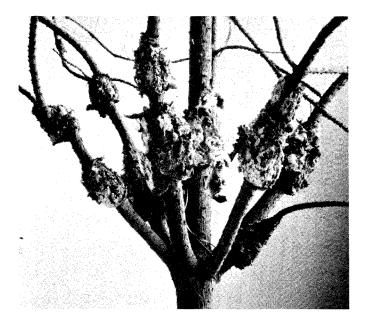
NO INFESTATIONS OF BLACK ARMY cutworm, *Actebia fennica*, were found or reported in 1975. In 1974, larvae were found at Purden Mountain, Carpet Lake road, Ptarmigan Creek and Karena Lake.

THE LEAF BLOTCH MINER, Lyonetia saliciella, caused discoloration of the leaves of most of the white birch from McBride to Yellowhead Pass, from Tete Jaune Cache to Albreda, and in the Canoe River Valley. Alder and willow in the near vicinity were also heavily infested.

ADVERSE WEATHER CONDITIONS EARLY in 1975 caused red belt of lodgepole pine, white spruce, Douglas-fir and some western red cedar from McBride southeast to Yellowhead Pass on the southwest side of the Rocky Mountains. By late June, discoloration was visible from Tete Jaune Cache to Albreda, and on the east side of the Bowron River in the Grizzly Creek headwaters.

LODGEPOLE PINE AND TREMBLING aspen trees were windthrown over approximately 50 to 75 acres in the Punchaw Lake - Bobtail Lake area. The trunks of aspens were generally broken while lodgepole pines were uprooted or broken at the butt. The area is used primarily for cattle range and the trees are valued as shelterbelts. Widespread but light current windfall of white spruce was observed throughout Naver, Willow, Bowron and McGregor river valleys. LIGHT INFECTION BY SPRUCE CONE rust, *Chrysomyxa pyrolata*, occurred in the District in 1975 even though the cone crop was heavy. From one to six per cent of the cones were infected in collections from Endako, Johnson Creek, Aleza Lake, Giscome and McBride. Several Pyrola plants, the secondary host for this rust disease, were examined but no signs of rust infection were found.

A SURVEY OF THE INCIDENCE OF globose gall rust, *Cronartium harknessii*, in lodgepole pine stands was conducted throughout the Prince George Forest District. One hundred random trees were examined at each of 42 locations. Globose gall rust was present in most areas. Stem attacks varied from 1 to 21% and branch infections from 1 to 41%. The heaviest stem attacks occurred at Chuchinka River, Finlay Forks road, Boundary road, Mi. 109 Alaska Highway, and on Blackwater road.



STATUS OF FOREST PESTS IN PACIFIC REGION 1975

PEST	DISTRICTS						
	PRINCE RUPERT	PRINCE GEORGE	VANCOUVER	CARIBOO	KAMLOOPS	NELSON	YUKON
MOUNTAIN PINE BEETLE	epidemic Kitwanga to Burns Lake	light attacks Stuart-Takla Lakes	severe tree mortality along Klinaklini R	epidemic, Cariboo L Tyee L, Bull Mtn Bald Mtn Klinaklini R	epidemic in Okanagan Va	epidemic, Elk Cr- White R, Blackwater Ridge,	not found
SPRUCE BEETLE	low populations	low populations	not common	low populations in wind-throw	localized infes- tation at Birk Cr	low populations	not found
DOUGLAS-FIR BEETLE	not found	low populations	scattered light attacks	patches red-tops Williams Lake to Dog Creek along Fraser R	increase scattered light attacks	increased attacks Columbia and Kettle R Valleys	no host
SPRUCE BUDWORM ONE-YEAR-CYCLE	low populations near Bell-Irving R Trace at Kitimat	epidemic Liard R area	epidemic in Lillooet, Fraser and Sumallo R Valleys	light defoliation Becher's Prairie	epidemic Lillooet, Adams L Manning Pk	low populations	trace
SPRUCE BUDWORM TWO-YEAR-CYCLE	low populations	low populations	not found	high populations MacKay River, Bowron circle	not found	epidemic at McMurdo and Bobbie Burns Cr., Spillimacheen R	not found
DOUGLAS-FIR TUSSOCK MOTH	not found	not found	not found	adults in traps only, no larvae collected in beatings	infestations N and W of Kamloops	low populations near Cascade	no host
FALSE HEMLOCK LOOPER	not found	not found	not found	not found	decrease, due to parasitism and pesticide	infestations at Columbia and Windermere Lakes	not found
BLACK ARMY CUTWORM	low populations	not found	not found	not found	localized infes- tation, little seedling damage	epidemic at Beaverfoot R and Symond Cr	not found
WESTERN BLACK- HEADED BUDWORM	decreased popula- tion, Q.C.I. and mainland	decreased population	low populations	low populations	low populations	low populations Upper Arrow Lake	low populations

FOREST DISTRICT RANGER ASSIGNMENTS 1976

