

## YUKON TERRITORY

Periods Worked: June 31 to August 6, and August 9 to 11.

Investigations in Yukon Territory in 1952 were carried out along the Alaska Highway from Watson Lake to Haines Junction, the Haines road, and the Carcross and Whitehorse districts north of Richthofen Lake.

Yukon Territory covers about 307,000 square miles, of which roughly one-eighth lies within the Arctic Circle. The Yukon River and its tributaries drain most of the region. The Liard rises in the southeastern corner and flows into the MacKenzie, and, in the southwest, the Alsek River cuts directly through the mountains to the Coast.

About half of the territory is covered by forest growth, the remainder being treeless tundra which borders on the Beaufort Sea and extends southward in an irregular pattern along the mountain ranges. With the exception of a limited intrusion of the coastal forest in the Alsek River valley, the boreal forest occupies all of the timbered areas. Its chief components are white spruce, aspen, lodgepole pine, balsam poplar and black spruce. Tamarack and white birch are common in the Liard valley, but rare or absent elsewhere in the southern part of the territory. Alpine fir occurs locally in the mountains.

Road travel is limited to the southern and central parts of the Yukon Territory. The Alaska Highway traverses the southern and southwestern portion for 500 miles. A 200-mile road serves the mining district around Mayo, and the Haines road gives access to the Coast. A road to Dawson was under construction in 1952.

### Insect Conditions

Spruce Bark Beetle, *Dendroctonus ? borealis*:— An infestation in white spruce was first reported from the Haines road in 1943. In 1948 it extended from Dezadeash Lake southward into British Columbia and northeastward along the Upper Dezadeash River to within seven miles of Champagne.

In 1952, the infestation had apparently subsided, although Warden J. Langvin reported finding freshly infested trees at Mush Lake, 20 miles west of the south end of Dezadeash Lake.

Tree mortality in the section covered by the Haines road had been heavy, extending 60 miles from the northern end of the infestation to the limit of timber in the Chilkat Pass. Over 90 per cent of the stand had been killed in the Tatshenshini valley close to the British Columbia boundary, and about 40 per cent at the northern end of the infestation near Dezadeash Lake.

**Climatic Injury:-** Climatic injury to lodgepole pine, white spruce, and rarely, alpine fir was widespread in southern Yukon and northern British Columbia in 1952 and was the cause for reports of bark beetle infestations in that region. Damage ranging from partial needle discoloration to outright killing was found from Teslin Lake westward to Haines junction. While injury was usually most severe on open, rocky southern slopes, there was the tree species most often affected, but this was because of its abundance on exposed slopes, spruce being rather uncommon on such sites.

Many of the trees sustaining winter injury that were examined supported a variety of bark beetles, almost all of which were species that normally attack weakened trees only.

**Lodgepole Pine Beetle, *Dendroctonus murrayanae*:-** This species was found in small numbers around the root collars of most of the dead or dying lodgepole pine examined. It is not known to attack healthy trees.

**Engraver Beetles, *Ips* spp.:-** Beetles of this genus were abundant in both white spruce and lodgepole pine that were dead or dying.

**Spruce Budworm:-** This species was represented in two spruce collections, near Carcross and on the Alaska Highway near Upper Rancheria River.

**Green-headed and Yellow-headed Spruce Sawflies, *Pikonema dimmockii* and *Pikonema alaskensis*:-** These species were taken in white spruce collections over a wide area in southern Yukon.

**Gone Insects, *Lepidoptera* spp.:-** White spruce cones in the Lewes River valley near Whitehorse were heavily infested by lepidopterous larvae which are as yet unidentified.

#### Summary of Forest Insect Survey Collections

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By Whom Collected	No. of Collections					Totals
	May	June	July	Aug.	Sept.	
Forestry Personnel Independently			5	1		6
Forestry Personnel with Biology Rangers				1		1
Biology Rangers Insects Independently			2	72		74
Other Forest Biology Personnel				7		7
Biology Rangers and other Forest Biology Personnel						
Other Sources						