



LIBRARY  
PACIFIC FOREST RESEARCH CENTRE  
506 WEST BURNSIDE ROAD  
VICTORIA, B.C.

Canada  
PFRRC  
Pest rept  
1973  
Mar. 2

# FOREST INSECT AND DISEASE SURVEY PEST REPORT

Pacific Forest Research Centre • Canadian Forestry Service • Victoria

March 2, 1973.

## FOREST INSECT AND DISEASE CONDITIONS IN THE ROCKY MOUNTAIN NATIONAL PARKS

Jack S. Monts

This report outlines the status of forest insect and disease conditions in Mount Revelstoke, Glacier, Yoho and Kootenay National Parks for 1972. Survey of pest conditions in the parks was done during the annual survey of the Nelson Forest District. An aerial survey covered the parks early in August.

### Forest Insect Conditions

#### Mountain pine beetle, Dendroctonus ponderosae

The number of red-topped western white pine trees observed during aerial surveys in early August decreased slightly. Along the Clachnacudainn Range in Mt. Revelstoke Park and along the Illecillewaet River in Glacier Park 110 and 150 red-tops were counted, respectively. Scattered attacks are expected to continue in these areas.

#### Dryocoetes-Ceratocystis complex

There was light alpine fir tree mortality in high-elevation spruce-alpine fir stands in Glacier and Kootenay National Parks; 40 and 125 red-tops were counted, respectively.

Two-year-cycle spruce budworm, Choristoneura biennis

An infestation of two-year-cycle spruce budworm caused light defoliation of understory Engelmann spruce and alpine fir trees on 22,000 acres along the Vermillion River in Kootenay National Park from Vermillion Crossing north to Mt. Whymper. Moth flights in August indicated that a significant population will persist. In 1973, C. biennis larvae will be in the first year of a two-year-cycle, that is in young larval stages, and defoliation will be restricted to bud damage.

Western hemlock looper, Lambdina fiscellaria lugubrosa

Hemlock looper populations increased in mature and over-mature hemlock-cedar forests in the wet belt areas of the two western parks. The largest numbers of larvae were found along the Mt. Revelstoke road and at Flat Creek; however no defoliation was evident. A large flight of moths in September in the Revelstoke area indicates the population will continue if the weather is favorable to the insect.

Forest tent caterpillar, Malacosoma disstria

Tent caterpillars again caused moderate to heavy defoliation of trembling aspen and other deciduous trees and shrubs in roadside stands along the Rogers Pass highway from Revelstoke to Albert Canyon. Egg population surveys indicated that defoliation can be expected in 1973.

Forest Disease Conditions

Winter injury

During the winter of 1971-72, semi-mature lodgepole pine trees in Kootenay and Yoho National Parks suffered moderate to heavy foliage damage as a result of unfavorable weather conditions. Spectacular foliage browning occurred on some south and west exposures above 4,000 feet elevation.

No extensive mortality is expected as a result of the winter damage. However, weakened trees may be subject to attack by other pests.

Lodgepole pine mistletoe, Arceuthobium americanum

Lodgepole pine stands along the Amiskwi River in Yoho National Park were heavily infected with A. americanum. Heavy brooming was noticeable from the natural bridge to the Otterhead River.