



FIDS PEST REPORT 94-34

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## FOREST INSECT AND DISEASE CONDITIONS IN YOHO NATIONAL PARK, 1994

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Some of the more important forest insect and diseases found in the park are discussed by host in this report. For a broader perspective, please refer to the annually published report, "Forest Insect and Disease Conditions, Nelson Forest Region, 1994".

Aerial surveys were conducted only in the Beaverfoot-Kicking Horse rivers junction area during surveys of the adjacent Golden Forest district surveys. Other infestations are mapped from roadside observations. Limited ground surveys were conducted between June and October.

This report is written in fulfillment of the requirements for obtaining and maintaining a Parks research/collection permit. Insect and disease problems have, in most cases, been previously discussed with Parks personnel during the course of field surveys.

### **PINE**

**Mountain pine beetle**, *Dendroctonus ponderosae*, killed an estimated 520 lodgepole pine on 15 ha, little changed from 1993. The main concentration continues on the south slopes across from Field. The number of spot infestations along the Beaverfoot River increased slightly. Other groups of about five trees were mapped on the flats between Otterhead and Emerald rivers.

An increase in the number of discoloring trees is expected in 1995 as a result of a threefold increase in current attack from 1993 at Field. In the Beaverfoot River area, minor increases can be expected, with current to red attack ratios of 2:1.

**Blowdown** of mainly pine was mapped over approximately 150 ha. The most severe damage was in the Kicking Horse-Beaverfoot rivers area, but 20 to 50% blowdown was noted in the flats between Otterhead and Emerald River, and broken tops were common through to Wapta Lake. Emerging Ips beetles are expected to attack limited numbers of adjoining standing trees in 1995. The low incidence of spruce and Douglas-fir in the main blowdown area poses only a very low risk of leading to a significant infestation, but there was a higher spruce component in some of the lighter blowdown areas along creeks, and similarly for Douglas-fir along ridges, which may lead to additional standing attack in 1995 and 1996, respectively.

Trees discoloring due to **porcupine and bear** damage are a common feature throughout the park. Concentrated attack continued along the Kicking Horse River between Porcupine Creek and Otterhead River.

### **SPRUCE**

**Spruce beetle**, *Dendroctonus rufipennis*, infestations were mapped along the Ice River over five ha. The main infestation followed population build-up in trees damaged in a snowslide near the head of the river, with smaller spot infestations near its confluence with the Beaverfoot River. The latter area has a chronic history of minor spruce beetle activity, associated with flood damaged trees. Beetle activity continued in chronic blowdown at Hoodoo Creek, where light attack was present on blowdown and there were several partial attacks on standing trees. The potential for a localized infestation remains. Other areas with potential localized beetle infestations starting are in blowdown areas mapped in 1992 along the Ottertail River and at Mt. Dennis. No ground surveys were done in these areas, but standing tree attack would not likely show up before 1995 or 1996. A similar increase in the number of localized spruce beetle infestations is occurring in the Golden TSA.

No feeding by mature **two-year-cycle spruce budworm**, *Choristoneura occidentalis*, larvae was noted along the Ice River, where alpine fir and spruce were defoliated over 730 ha in 1993.

### **DECIDUOUS TREES**

A combination of **aspen leafrollers**, including *Pseudexentera oregonana*, and *Epinotia* sp., along with **satin moth**, *Leucoma salicis*, continued to moderately defoliate trembling aspen along the western portion of the park. The main center of the infestation covered 300 ha, most of it outside the park.

No **gypsy moth**, *Lymantria dispar*, adults were caught in traps placed at campgrounds in the park.

Areas of current insect infestations in Yoho National Park,  
 Forest Insect and Disease Survey, 1994

