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PEST REPORT

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Tent Caterpillars in B.C., 1987

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Forest Insect and Disease Survey

Defoliation of deciduous trees and shrubs by increased numbers of forest tent caterpillars, Malacosoma disstria is more severe and widespread in parts of the Nelson, Prince George, Cariboo and Kamloops forest regions than in 1986. Defoliation by western tent caterpillar, M. pluviale, however, has declined to generally moderate in the lower mainland, Gulf Islands and east coastal parts of Vancouver Island due mainly to increased incidence of virus infection. Low populations are present in the central part of the Okanagan Valley.

A mild winter and warm spring advanced larval development by up to three weeks in some areas including southern Vancouver Island. Larval feeding was evident in mid-April near Victoria and pupae were evident in the West Kootenay in the first week of June.

Egg mass surveys to forecast population trends for both species in 1988 will be available later.

Although both species are occasionally found together a few differences help to distinguish them from each other. The forest tent caterpillar appears mainly blue on a black body color; it infests mainly trembling aspen and other poplars in the interior; it congregates in masses on tree stems rather than in webs and when epidemic it migrates in great numbers.

The western tent caterpillar appears mainly orange on a black body, with white keyhole shaped spots down the back; it infests mainly alder and birch in coastal areas and in the southern interior; it spins a conspicuous web and is more colonial and less migratory.

Forest Tent Caterpillar

Defoliation of mainly trembling aspen, cottonwood and birch, is most widespread near Trail, Rossland, Castlegar, and Slocan in the Nelson Forest Region, where about 120 separate stands over 5 500 ha are moderately or severely defoliated. This is a fivefold increase from 1986 and the fourth consecutive year of defoliation in core areas. Increased populations in the East Kootenay

defoliated deciduous hosts in numerous small pockets from Creston to Golden including several cottonwood stands covering up to 200 ha in the Kootenay River Valley near Ft. Steele, Wardner, Galloway and near Kitchener.

Following a decline in the Prince George area in 1986, populations have increased and numerous pockets of aspen have been severely defoliated in the Chief and Nukko lakes area northwest of Prince George, on Tabor Mountain and west of Prince George. Defoliation of aspen and cottonwood stands in the Peace River area is expected to occur, for the fourth consecutive year, where about 170 stands totalling 91 700 ha were defoliated in 1986.

For the first time in 10 years, defoliation of trembling aspen has occurred in the Cariboo Forest Region. Stands up to 100 ha north of Nusatsum Creek near Hagensborg were lightly to severely defoliated and several trees near Belarko were lightly defoliated.

In the Kamloops Forest Region increased forest tent caterpillar populations severely defoliated poplar, willow and maple over about 5 ha at the south end of Monte Lake. Previous infestations, the last in 1979, occurred mainly in the North Thompson River Valley.

Western Tent Caterpillar

Colonies are common for the second consecutive year in the Okanagan Valley near Kelowna. However, defoliation of small pockets of alder, birch and other deciduous trees and shrubs is very light.

In southwestern British Columbia colonies are numerous and widespread, in some areas for the seventh consecutive year. However, in most areas up to 50% of the larvae have been infected and killed by a nuclear polyhedrosis virus (NPV), before they matured. This has resulted in significantly less severe defoliation than expected from the high numbers of young larvae in the numerous colonies throughout the Fraser Valley, Sunshine Coast on the Gulf Islands and in east coastal areas of Vancouver Island.

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