PEST REPORT

Pacific and Yukon Region • Pacific Forestry Centre • 506 West Burnside Road • Victoria, B.C. • V8Z 1M5

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FOREST TENT CATERPILLAR, PRINCE GEORGE FOREST REGION 1990 UPDATE AND FORECAST FOR 1991

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SUMMARY

Forest tent caterpillar, Malacosoma disstria, populations increased in the Prince George Forest Region in 1990, as predicted, and defoliated mainly trembling aspen over 193 675 ha (see attached map), almost double the 108 290 ha defoliated last year. This was the seventh consecutive year of defoliation in the Peace River area, the fifth in and around the City of Prince George, and the second in the McBride area. Populations are forecast to continue in 1991, and widespread moderate to severe defoliation is predicted in and around the City of Prince George.

DAMAGE

Defoliation region-wide was severe over 97 755 ha, moderate over 71 470 ha, and light over 24 450 ha; however, most trees refoliated by mid-summer. The severe defoliation and high numbers of migrating larvae were a major inconvenience to property owners in the Prince George area for the third straight year. Several consecutive years of severe defoliation, usually combined with drought, poor site conditions, and stand age (overmaturity), are necessary before tree mortality occurs. To date, tree mortality, directly attributed to tent caterpillar defoliation, has not yet been observed; however, upper crown dieback occurred in some stands in the Salmon River Valley and near Farmington. This followed four to five consecutive years of moderate to severe defoliation.

FORECAST

Egg mass surveys at 12 locations near the City of Prince George found an average of 17 new egg masses (range 2-49) per 10-cm tree; counts greater than 10 egg masses usually result in severe defoliation. This is down from an average of 38 per tree in 1989, and indicates declining populations; however, widespread defoliation is still expected.

In the Peace River area egg masses averaged two per tree, indicating only trace to light defoliation. At McBride, less than one egg mass per tree at two locations indicates only trace defoliation in 1991.

Levels of parasitism in mass larval collections were too low to effectively reduce populations; results of disease isolations are pending.

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CONTROLS

Homeowners can reduce populations by clipping and destroying egg masses during the winter or early spring months. The grey masses, covered with a silvery-brown protection layer, are found completely encircling small twigs. These are quite visible on small trees before leaf flush. Also, early spring larval colonies can be clipped and burned before the young larvae disperse to feed.

Once larvae have disbursed and feeding is underway, control with insecticides may be considered where populations and resulting damage is of particular concern. The following are registered for use in British Columbia against the forest tent caterpillar. When using insecticides, remember to always follow the directions and application rates listed on the label.

Biological insecticides, containing Bacillus thuringiensis: Dipel 132; Thuricide 48LB;

Chemical insecticides: Sevin (various formulations); Ortho (Orthene); Ambush 500 EC.

Forestry Canada's Forest Insect and Disease Survey (FIDS) will continue to monitor forest tent caterpillar populations in 1991. A pest report will be issued following early season population assessments.

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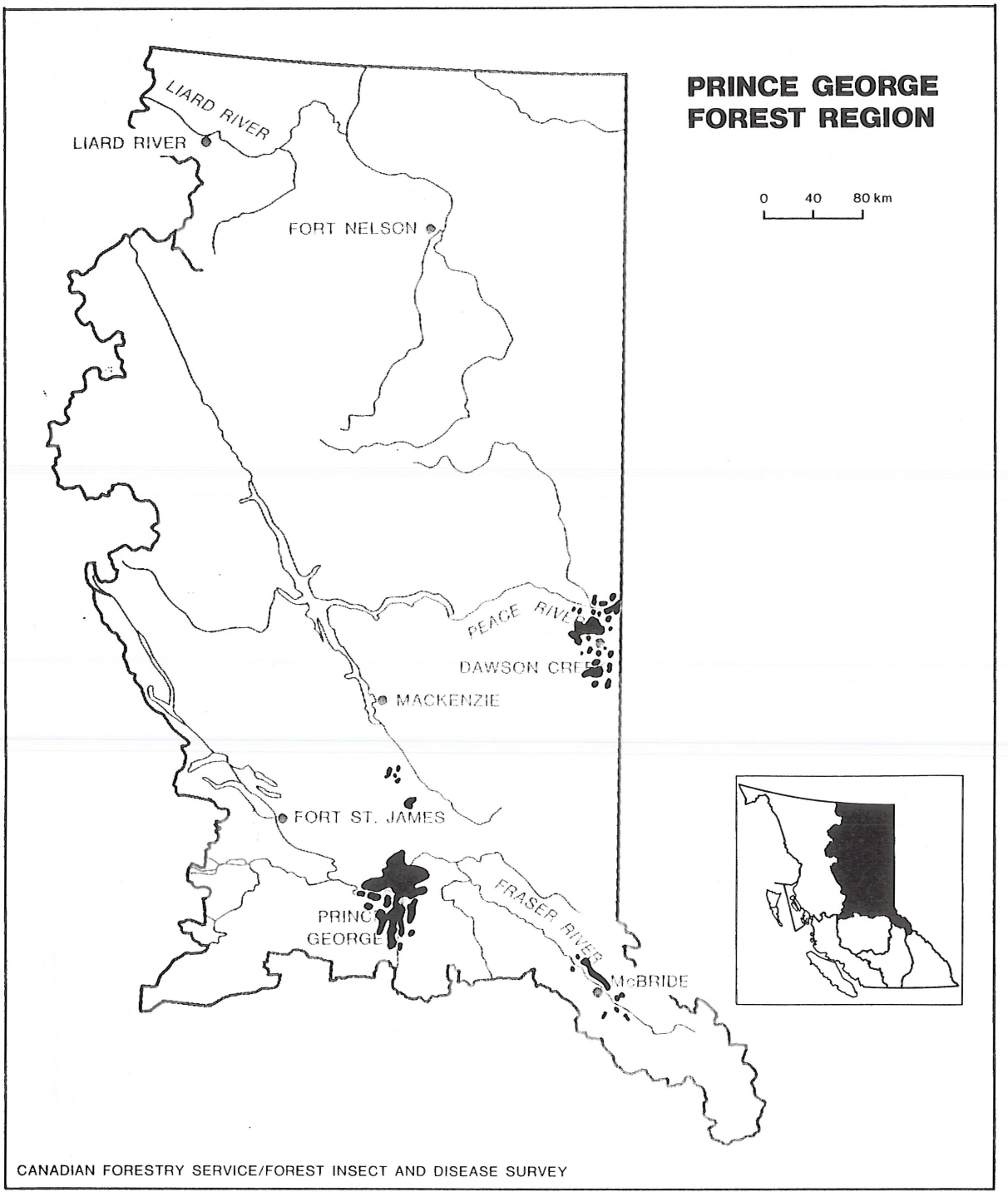
PRINCE GEORGE
FOREST REGION
0 40 80 km
LIARD RIVER
LIARD RIVER
FORT NELSON
PEACE RIVER
DAWSON CREEK
MACKENZIE
FORT ST. JAMES
PRINCE GEORGE
FRASER RIVER
McBRIDE
CANADIAN FORESTRY SERVICE/FOREST INSECT AND DISEASE SURVEY