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PEST REPORT

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FIDS Pest Report 92-25

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SUMMARY OF FOREST PEST CONDITIONS IN THE PRINCE GEORGE FOREST REGION

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This report is a brief summary of major forest pests in the region, up to early September. A more detailed report on these and other pests, as well as some forecasts, will be available later in the year.

Spruce beetle populations increased for the fourth consecutive year. Aerial surveys recorded scattered mortality over an area in excess of 50 000 ha from southeast of Prince George to north of Mackenzie.

Eastern spruce budworm populations declined for the second consecutive year and lightly defoliated alpine fir and spruce over 132 000 ha in the Fort Nelson District, down by half, but increased in the Fort St. John District for the first time. Defoliation by mature **two-year-cycle spruce budworm** increased five-fold to over 104 000 ha, including 58 000 ha in the Prince George Forest District, 33 000 ha in the McBride district and 13 000 ha in the Fort St. James district.

Spruce weevil continued to kill significant numbers of new leaders in young spruce stands throughout the southern half of the region. Reports of weevil damage near Fort Nelson have not yet been confirmed. There were no new reports of attacks by the **northern spruce engraver** beetle killing tops of mature white spruce east of Summit Lake and west of Takla Lake.

The area of mature lodgepole pine recently killed by **mountain pine beetle** decreased slightly for the first time in three years to less than 10 000 ha. Most were in the Fort St. James District (over 8000 ha). Sampling for **pinewood nematode** using pine, hemlock and cedar log bolts continued for an exemption of hemlock from the EEC ban on non-kiln dried wood products. **Pine stem rusts** were the major cause of mortality of trees in young stands surveyed throughout the region. **Root collar weevil, stem rusts** and **secondary insects** were common in lodgepole pine at four plantations, established in 1986 as a joint Canada-Sweden project.

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Defoliation of mature to overmature western hemlock-western red cedar and mature Douglas-fir stands by the western hemlock looper increased significantly to over 28 000 ha in 77 infestations, up from 200 ha in 1991. Over 80% of the area was severely defoliated, with the loss of most or all foliage on more than 50% of the trees. About 60% of the area defoliated was in the Prince George Forest District, the remainder in the McBride Forest District.

The area of mature alpine fir recently killed by balsam bark beetle increased nearly six-fold to about 40 000 ha, with over 35 000 ha of this area being in the Fort St. James District. Douglas-fir beetle killed an increased number of mature trees over about 2500 ha, mostly in the McBride and Fort St. James districts.

Black army cutworm populations remained static with no defoliation recorded. The results of pheromone trapping will be available later. Surveys of 50 sites at widespread locations, treated under the 1990-1991 Forest Resource Development Agreement, found the most common pests were stem rusts, root and terminal weevils, adelgids and environmental damage.

Forest tent caterpillar populations decreased throughout much of the Prince George Region, but still defoliated trembling aspen over more than 21 000 ha. Defoliation increased in the McBride Forest District over 9700 ha, but none was recorded in the Peace River area for the first time in ten years. Large aspen tortrix populations increased for the fourth consecutive year and defoliated stands over 24 000 ha, mainly north of Mackenzie along Williston Lake and in the Finlay River Valley. Increased poplar-willow borer populations killed willow trees throughout the region.

Three new acid rain long-term bio-monitoring plots were established in the region at Willow River east of Prince George, near Dawson Creek and near Fort St. John. There were no acid rain symptoms recorded at a plot near Averil Lake monitored since 1987.

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