

92-26

FIDS Pest Report 92-26

SEPTEMBER 1992

**SUMMARY OF FOREST PEST CONDITIONS  
IN THE VANCOUVER FOREST REGION**

R. Turnquist, D. Clarke  
Forest Insect and Disease Survey

This summary is an overview of some major forest pests active in the region up to early September. A more detailed report on these and other pests, their impact, and some forecasts will be available later in the year. The spring and summer of 1992 was unusually warm and dry. This followed a warmer than usual winter with below normal snow pack in the coastal areas. These weather conditions favored overwintering insect populations, caused early commencement of life cycles, and may be responsible for the increase in damage caused by some defoliating insects.

Defoliation by the western spruce budworm increased fourfold to 21 135 ha in 47 infestations. Increases occurred in the Lillooet River Valley, where defoliation was observed from the Wolverine Creek area northwest to the head of the Lillooet River, and in the Birkenhead River-Gates Lake area south of Anderson Lake in the Kamloops Region. New areas of defoliation were observed in the Hannah Lake and Hannah Creek area in the Nahatlatch River valley. Mortality caused by Douglas-fir beetle declined by one-third to 170 ha. The Fraser TSA again contained most of the damage, mainly in the Fraser and Anderson River areas, and in the Chilliwack and Skagit River valleys. Mortality in the Soo TSA continued to occur in the Pemberton area. Although the area of mortality declined, the number of infestations increased to 210 from 57 in 1991. Larger infestations, particularly in the Anderson River area, died out, while newer, spot infestations increased Region-wide. For the third consecutive year, Douglas-fir tussock moth lightly to severely defoliated roadside, shade and ornamental Douglas-fir in the Chilliwack-Clearbrook-Abbotsford area. Roadside trees west of Chilliwack were severely defoliated, while individual trees at the Chilliwack Golf and Country Club were lightly to moderately defoliated even after two spring applications of Bacillus thuringiensis var. kirstaki (Btk., Foray 48B).

Recent mortality in lodgepole pine caused by mountain pine beetle increased by half to 775 ha in 152 infestations. Most of this, 720 ha, was in the Soo TSA, particularly in the Birkenhead River area north of Pemberton. The area of beetle-killed pine in Manning park declined to some 55 ha. No mortality was seen or reported in the Sunshine coast or Mid-coast TSA's. Pinewood nematode surveys concentrated on surveying decked hemlock logs for the presence

of woodborers, particularly sawyer beetles, Monochamus species. About 1300 logs were examined at 13 dry land sort locations, and various woodborers, but no Monochamus sp. were found. Additionally, 25 western hemlock and 25 lodgepole pine logs 1 metre long were placed as trap logs at a woodborer-infested site near Meagher Creek in the Lillooet River Valley. Results of this study will be reported later this year.

**Western blackheaded budworm** populations on northern Vancouver Island continued at endemic levels for the second consecutive year; no defoliation was reported or recorded.

Recorded mortality by the **balsam bark beetle** declined by almost half to 620 ha. Most of the mortality continued to occur in the Fraser TSA. **Balsam mortality** partially attributed to the balsam woolly adelgid south of the Port Alberni area remained unchanged.

**Spruce beetle** populations remained low for the seventh consecutive year; no mortality was observed or reported. **Spruce weevil** continued to kill Sitka spruce leaders throughout the host range, with increased attacks observed and reported at the head of south coast inlets in the Sunshine Coast TSA. Increased **spruce aphid** populations lightly to severely defoliated native and ornamental spruce as far as Hope, and in the inner and outer coastal areas including islands north of Campbell River.

Assessments of tree conditions at 10 existing **ARNEWS** (Acid Rain National Early Warning System) plots found no evidence of acid rain. Tree mortality of less than 5% was attributed to natural causes. Additionally, one new **ARNEWS** plot was established this year on Saturna Island. About 30 planted and natural **young stands** were surveyed for pest problems which included root rots, foliar diseases, climatic damage and mechanical injury. Thirteen **seed orchards** were examined once, detecting low levels of pests including balsam woolly adelgid, cooley spruce gall adelgid, and hemlock woolly adelgid.

**Winter moth** populations increased in the lower mainland area, lightly to severely defoliating individual and groups of deciduous trees in the Delta, Ladner and Surrey area and in the City of Vancouver in the Point Gray-Marine Drive area. Patchy moderate and severe defoliation was also reported in two areas in south Vancouver. In Greater Victoria, scattered light to severe defoliation occurred in historically active areas. **Oak leaf phylloxera** damage to Garry oak remained similar to levels recorded in 1991. **Jumping gall wasp** damage increased and spread, particularly into Oak Bay and Victoria. Populations, but no damage, were found for the first time as far up-Island as Nanaimo. **Bigleaf maple scorch** increased in incidence and intensity on Vancouver Island and the mainland. **Dogwood leaf blight** severely infected trees throughout the host range. **Cottonwood sawfly** lightly to severely defoliated native and some hybrid poplars over some 685 ha, mainly on Islands in the Fraser River tenfold increase from last year. **Fall webworm** populations increased in the Fraser Valley and on Vancouver Island. **Birch leafminer** populations increased, causing light to severe scorching throughout the upper Fraser Valley and lower Fraser Canyon.