

FIDS PEST REPORT 94-11

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PHANTOM HEMLOCK LOOPER DEFOLIATES DOUGLAS-FIR IN BURNABY, B.C.

R. Turnquist
Forest Insect and Disease Survey

Increased phantom hemlock looper, *Nepytia phantasmaria*, populations defoliated semi-mature and mature Douglas-fir over several residential blocks bounded by Southeast Marine Drive in Burnaby. Mostly moderate, with some severe, defoliation and top stripping occurred in the Gilley Avenue, Rumble Street, and Macpherson Avenue areas in early July.

Numerous larvae were crawling on houses, sundecks, sidewalks, and other plants underneath infested trees, and insect droppings (frass) were common on sidewalks, boulevards, back alleys and gutters throughout the area. Larval feeding is almost concluded, and they should begin to pupate by the end of July. A large flight of the white and grey moths will probably occur in the area in late August. Residents note this is the second year of populations in this area, with larvae, very light defoliation and a large moth flight being observed last summer.

Larvae are currently in rearing at the Pacific Forestry Centre in Victoria to determine the presence of disease or parasites. If these and related natural control factors are not present, looper populations may cause further defoliation in 1995. The defoliated Douglas-fir have the capacity to recover from the defoliation, however, additional years of severe defoliation may result in top kill, or tree mortality and further public attention.

Native to British Columbia, looper outbreaks have been recorded in the lower mainland at Central Park in Burnaby, Queens Park in New Westminster, and Hope Municipal Park in 1956-57, and at Coquitlam Lake in 1982. Douglas-fir and western hemlock were reported killed at Queens Park, but not at Hope, Central Park or at Coquitlam Lake. The infestation at Coquitlam Lake collapsed due to infection of larvae by disease.

The Forest Insect and Disease Survey (FIDS) acknowledges assistance of the British Columbia Forest Service, Vancouver Regional Entomologist, for bringing this outbreak to our attention. For further information on this pest, contact Natural Resources Canada, Canadian Forest Service, FIDS, Victoria, at 363-0600.
