



LIBRARY
PACIFIC FOREST RESEARCH CENTRE
506 WEST BURNSIDE ROAD
VICTORIA, B.C.

Canada
PFRC
Pest rept
1972
Aug 22

FOREST INSECT AND DISEASE SURVEY **PEST REPORT**

Pacific Forest Research Centre • Canadian Forestry Service • Victoria

August 22, 1972

FALSE HEMLOCK LOOPER DEFOLIATION OF DOUGLAS-FIR NEAR SALMON ARM, B.C.

D. A. Ross

The western false hemlock looper, Nepytia freemani has caused moderate to severe defoliation of some 2,000 acres of semi-mature Douglas-fir in the Salmon Arm area. More specifically the localities affected are White Lake, Tappen and Canoe. The most spectacular defoliation is on the southeastern slope of Bastion Mountain, near Sunnybrae, on Shuswap Lake. So far the epidemic is chiefly in poor stands, on private property, however the damage is unsightly and is particularly objectionable to homeowners located within or adjacent to the defoliated stands. A small portion of the infestation is on holdings of Federated Co-op of Canoe, B.C.

A fairly high rate of starvation of larvae occurred on trees that were completely stripped of foliage, however a heavy population of pupae is present in the lower crown of trees on the periphery of each of the dozen or so areas of moderate to severe defoliation. Only about 10 per cent of the pupae have been parasitized so that a large moth flight is expected.

The Forest Insect and Disease Survey plans a survey of the egg population early in October in order to obtain information for predictions of damage in 1973.

Many Douglas-fir trees have been severely defoliated, however it is believed that the 1972 defoliation will not result in significant tree mortality. If severe defoliation recurs in the same stands in 1973, tree mortality may ensue, the amount dependent on weather conditions and the stand site.

In the summer of 1972 larvae of the false hemlock looper were sent to the Chemical Control Research Institute in Ottawa for insecticidal tests. Results will be available in the fall of 1972. Biologists from the Canadian Forestry Service, Victoria, B.C. are currently testing the effectiveness of two insect pathogens against the false hemlock looper.

The only other known epidemic of this looper in British Columbia occurred in the Windermere Valley from 1947 to 1949 and resulted in some top-killing and tree mortality, over several thousand acres of Douglas-fir stands.