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Large Aspen Tortrix in the Vanderhoof Forest District

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The large aspen tortrix, Choristoneura conflictana, is defoliating deciduous trees and shrubs in the Vanderhoof Forest District for the first time in several years. Over several thousand hectares of mostly mature trembling aspen has been completely defoliated over scattered areas from just east of Vanderhoof to Fraser Lake.

Infestations range in size from 5-150 ha and extend, basically in mature aspen stands, along the Nechako River Valley, with infestations broken up by farmland and conifer forests. The dark green larvae are defoliating the understory in areas where the mature trees have been completely stripped. Feeding on plant species other than aspen has also been noticed at several locations indicating that the populations will probably starve themselves in these areas. The large aspen tortrix needs nutrients that can only be provided by aspen; depletion of the aspen food supply is often cited as a main cause of population collapse. Larval collections from the Engen and Braeside areas have been made to determine the level of parasites and disease in the population, which can also be major limiting factors in the spread and duration of infestations.

The last infestation in this area, 1980, covered almost 40 000 ha and extended north past Fort St. James. Outbreaks usually only last 2-3 years and often precede those of the forest tent caterpillar. The feeding may result in reduced tree vigor and stem growth, occasionally killing the treetop and upper branches. Tree mortality rarely occurs directly from larval feeding because aspen trees usually refoliate within 4-6 weeks after feeding is complete.

Insecticidal sprays, including the bacterial insecticide Bacillus thuringiensis (Bt), have been used to control this pest. The most effective time to spray is in May to young larvae migrating to the buds or in August to older larvae migrating to their hibernation sites.

For further information contact Forestry Canada in Prince George at 963-2213.