Pacific Forestry Centre • 506 West Burnside Road • Victoria, B.C. • V8Z 1M5

FIDS PEST REPORT 94-16

August, 1994

BLACK-HEADED BUDWORM IN THE KAMLOOPS FOREST REGION

J. Hodge & P. Koot Forest Insect and Disease Survey

A new outbreak of western blackheaded budworm defoliated 1400 ha of mature and overmature western hemlock stands in the interior wet belt portion of the Okanagan TSA. This is the first year of defoliation in the Kamloops Region since the 1985-1988 outbreak in Wells Gray Provincial Park. Defoliation however has occurred since 1993 in western hemlock stands northwest of Revelstoke, close to the Kamloops/Nelson regional border.

The majority of the defoliation occurred in mature western hemlock stands in the Salmon Arm Forest District along the Eagle River Valley. Five separate infestations causing light defoliation were recorded during aerial surveys at Craigellachie, Crazy and Wap creeks and Victor Lake. The remainder occurred near Mabel Lake in the Vernon Forest District where moderate defoliation occurred at Hound Creek while light defoliation was observed at Noisy Creek. Some light feeding on the understory spruce was also noted at Hound Creek. While the majority of feeding was caused by western blackheaded budworm, standard beating samples indicated that larvae of the western hemlock looper and conifer sawflies were also present.

Damage caused by western blackheaded budworm varies according to intensity and duration of outbreaks. Severe defoliation for one or two years may result in top-kill while outbreaks exceeding two to three years increases the risk of tree mortality. Light defoliation as experienced this year will likely result in increment loss.

Egg mass sampling will be conducted this fall in affected areas to aid in predicting expected defoliation for 1995. Many of the larvae observed at Hound Creek were dead, perhaps due to the extremely warm temperatures and lack of precipitation this summer.
