

Canada  
PFRC  
Pest rept.  
1990  
Sept.  
[2]



Forestry  
Canada  
Forêts  
Canada

Library  
AKZV

# PEST REPORT

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

SYDNEY

September, 1990

## EASTERN AND TWO-YEAR-CYCLE SPRUCE BUDWORMS

### IN SPRUCE FIR FORESTS

### IN THE PRINCE GEORGE FOREST REGION

R. Turnquist and R.L. Ferris  
Forest Insect and Disease Survey

LIBRARY  
SEP 21 1990  
FORESTRY CANADA  
PACIFIC & YUKON  
506 W. BURNSIDE RD.  
VICTORIA, B.C. V8Z 1M5 CANADA

Eastern spruce budworm, *Choristoneura fumiferana*, populations in the Fort Nelson area defoliated spruce-fir stands over more than 150 000 ha in 1990, some for the sixth consecutive year, and up from 123 750 ha in 1989. Mature 2-year-cycle budworm, *C. biennis*, populations increased slightly south of McBride but declined significantly in previously infested spruce-fir stands east of Prince George, where stands were defoliated by immature larvae over 4200 ha in 1989.

Defoliation by eastern spruce budworm was mostly moderate with patches of severe from the Coal River, east along the Liard River to the Toad River, and north to the Northwest Territories border. This included the Beaver, La Biche and Dunedin rivers and the Fort Nelson River from Nelson Forks east to the Snake River and south to around Fort Nelson. Defoliation was also widespread from Steamboat Creek east to Kledo Creek, along the Muskwa River to Fort Nelson, and along the Prophet River from Fort Nelson to south of Jackfish Creek. Severe defoliation of regeneration and understorey alpine fir has occurred in some areas for two consecutive years; this could result in top deformity and mortality of terminal and lateral buds.

Defoliation by mature 2-year-cycle spruce budworm in previously defoliated stands east of Prince George declined overall to less than 4000 ha in 1990. The decline, possibly due to inclement weather in May-June, was north of McBride in the Morkill River and Forgetmenot Creek valleys, in the Slim, Tumuch, Everett and Dome creek drainages, in the Bowron River Valley and near Stony Lake. New areas of defoliation, however, were mapped over about 250 ha south of McBride at Betty Wendle Creek and the Milk River Valley.

Egg mass samples will be collected with the cooperation of the B.C. Forest Service and forest industry in the Fort Nelson area, to forecast eastern spruce budworm population trends in 1991. Results will be available later this Fall.

\* \* \* \*