

Forest Insect and Disease Conditions

Yukon Territory

1978

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Except for three small new infestations of large aspen tortrix, insect populations declined throughout the Yukon in 1978. A needle disease caused conspicuous discoloration of lodgepole pine over large areas, and a canker disease caused mortality and dieback of white spruce, particularly around Minto Landing.



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LARGE ASPEN TORTRIX,
Choristoneura conflictana

Trembling aspen were almost completely defoliated by large aspen tortrix along the Alaska Highway from km 1534 to 1536; along Highway 3 (Dawson-Stewart Crossing) from km 74 to 80, and along Highway 2 from km 224 to 226. Elsewhere in the Yukon no defoliation was observed and few larvae were found.

LARCH BUDMOTH,
Zeiraphera improbana

Larch budmoth populations in the Hyland River Valley declined in 1978. Noticeable defoliation did not occur in larch stands in the area. Three and nine larvae were found in two collections, and samples at four locations were negative.

WEATHER DAMAGE

Winter drying affected the 1977 foliage of black spruce from km 152 to 158 along the Dempster Highway and from km 13 to 15 along Highway 3.

Trembling aspen, on a south-facing slope along Highway 3 from km 15 to 17.5, were damaged by late frosts, resulting in more than 75% of the trees having only a very few leaves. At the junction of Highways 2 and 3, a small group of aspen 3 to 4 metres high died after leafing out, possibly as a result of frost damage since no disease was present. Western white birch trees were declining and dying from the top down, particularly around Midnight Dome Mountain near Dawson City. A late frost may have been responsible since no disease organisms were evident.

A LODGEPOLE PINE NEEDLE CAST,
Lophodermella montivaga

Severe discoloration and foliage loss of regeneration pine occurred from the junction of Highway 2 and the Alaska Highway north along Highway 2 to km 7. Almost all trees under 1.5 m high had up to 100% of the 1977 needles affected. Infection was especially severe over 1 000 ha around the Takhini nursery. Lighter infection occurred sporadically beyond km 7, with a severely infected stand at km 30-31. Severe infection extended west along the Alaska Highway from the junction to km 1 500, with lighter infection up to km 1 502. Along Canol Road (Highway 8), light infection of lodgepole pine occurred from Johnsons Crossing north to Quiet Lake, about 5% of the trees with one-quarter of the year-old foliage being infected.

Lophodermella concolor, sometimes in association with L. montivaga, was found near the Takhini nursery and at the provenance trial area near Watson Lake.

CALCIUM CHLORIDE DAMAGE

Calcium chloride, applied for highway dust control, caused severe damage to roadside white and black spruce and lodgepole pine, particularly along highways used by heavy ore trucks. Dead and dying trees flank much of Highway 2 from Whitehorse to Carmacks, Carmacks to Mayo, and Highway 9 from Carmacks to Faro.

ATROPELLIS CANKER OF PINE,
Atropellis piniphila

A few trees were infected by A. piniphila in the Yukon at km 62 on the Canol Road. Several trees were apparently killed by the fungus at Marsh Lake, southeast of Whitehorse. These are the first collections of A. piniphila from the Yukon.

CANKER DISEASE,
Leucostoma kunzei

Top-killed white spruce occurred sporadically over 200 ha around Minto Landing. Affected trees were 1-12 m high and many of the smaller trees were dead. Branch and stem cankers, caused by L. kunzei, were identified from three sampled trees.

Some Pests of Current Minor Significance

Pest	Host(s)	Locality	Remarks
<u>Acleris gloverana</u> Western blackheaded budworm	Spruce, white and black	General	Low numbers of larvae from widespread locations.
<u>Dendroctonus</u> <u>rufipennis</u> Spruce beetle	Spruce, white	Aishihik L	A few new attacks on flood-damaged trees.
<u>Ceratocystis</u> sp. Blue stain	Pine, lodgepole	Watson Lake	Disease vectored by bark beetles. 50% of trees dead on 4 ha.
<u>Chrysomyxa</u> <u>ledicola</u> Spruce-Labrador- tea rust	Spruce, white	General	Light on spruce. Prevalent on alternate host.
<u>Coniophora</u> <u>puteana</u> Root and butt rot	Spruce, white	McClintock Cr., Stewart Crossing	About 1% of mature trees killed.
<u>Sydowia polyspora</u> Die-back	Pine, lodgepole	Watson Lake	Scattered top-kill.
<u>Septogloeum</u> sp. Leaf-spot	Aspen, trembling	Lake Laberge	50% of trees have 75% of leaves infected.

STATUS OF FOREST PESTS IN PACIFIC REGION 1978

PEST	FOREST REGIONS						
	PRINCE RUPERT	PRINCE GEORGE	VANCOUVER	CARIBOO	KAMLOOPS	NELSON	YUKON
SPRUCE BEETLE	17 000 ha infestations mainly in the Babine Lake and Morice R. areas	Extensive areas of tree mortality	Localized attacks Mowhokam Cr.	Low population in northeastern corner of Region	Localized infestations, upper Lambly Cr., Lawless Cr., Olivine Cr. Increasing populations in blow down areas	New, spot infestations	Low populations Haines Jct area
MOUNTAIN PINE BEETLE	Widespread infestation, Cedarvale to Smithers	Active in widely separated areas	Infestation declined Klinaklini R. Localized infestations Haymore and Mowhokam Creeks	Heavy infestation in scattered areas throughout Region	Heavy infestations Trout Cr., Gun Lake area. Increased populations, Below Mission Cr., Stein R. Ashnola R.	Increasing in West Kootenay exploding in East Kootenay	Not found
DOUGLAS-FIR BEETLE	Not found	Low frequency of tree mortality near McBride	Light attacks Fraser Canyon, Silver Skagit, Pemberton	Low population	Increased populations Tranquille Cr. Heffley Cr., Dairy Cr. and along Carpenter L.	Small pockets	No host
WESTERN SPRUCE BUDWORM (1-YEAR-CYCLE)	Low populations	Low populations	Populations declined sharply in many areas of the infestation.	Medium population, lighter than 1977	Significant decrease in most infested areas. Light to moderate populations near Ashcroft	Small populations holding steady	Low population
SPRUCE BUDWORM (2-YEAR-CYCLE)	Low populations	Increasing populations some current defoliation	Not found	Medium to high population, eastern part of Region	Medium population near Lempriere Cr.	Increasing populations	Not found
WESTERN BLACKHEADED BUDWORM	Minor defoliation Bell-Irving R.	Very low populations	Population increase, west coast Vancouver Island	Low population	Very low populations	Low populations	Low population
CONIFER SAWFLIES <i>Neodiprion</i> spp.	Moderate defoliation 1300 ha wH, aIF at Carrigan and Ironside creeks	Infestations subsided	High populations on northern Vancouver Isl.	Low populations	Infestation collapse near Vavenby and Clearwater R.	Low populations	Low population
FOREST TENT CATERPILLAR	Not found	General collapse of infestation	Not found	Not found	Low populations	Low populations	Not found
ASPEN LEAF AND SHOOT BLIGHT	Heavy infection Houston area	Extensive widespread damage	Not found	Light to moderate incidence Big Lake to Canim L.	Severe browning of foliage at Clearwater R. Avola and Monashee Cr.	Widespread light infection of aspen	Low incidence

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