

**FOREST INSECT AND DISEASE CONDITIONS IN ALBERTA
PROVINCIAL PARKS, 1973**

by

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TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
PROVINCIAL PARKS	2
Aspen Beach Park	2
Beauvais Lake Park	2
Bow Valley Park	3
Chain Lakes Park	4
Crimson Lake Park	4
Cross Lake Park	5
Cypress Hills Park	6
Dillbury Lake Park	7
Dinosaur Park	7
Entrance Park	8
Garner Lake Park	9
Gooseberry Lake Park	9
Gregoire Lake Park	10
Hommy Park	10
Jarvis Bay Park	10
Kinbrook Island Park	11
Lac Cardinal Park	11
Lesser Slave Lake Park	12
Little Bow Park	12
Little Fish Park	13
Long Lake Park	13
Miquelon Lake Park	14
Moonshine Lake Park	14
Pembina River Park	15
O'Brien Park	16
Park Lake Park	16
Pigeon Lake Park	17
Rochon Sands Park	18
Saskatoon Island Park	18
Sir Winston Churchill Park	19
The Vermilion Park	19
Thunder Lake Park	20
Wabamun Lake Park	21
Williamson Park	22
Winagami Lake Park	23
Writing-On-Stone Park	23

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INTRODUCTION

During the general Forest Insect and Disease surveys in Alberta in 1973, inspections were conducted in many of the Provincial Parks for the presence of insect and disease infestations and infections. Some Parks were not examined because of inclement weather at the time the ranger was in the area. The following report lists the noteworthy insects and diseases reported and includes short accounts of populations and damage in each Park examined.

* Supervisor, Insect and Disease Survey; and

** Ranger, Insect and Disease Survey.

PROVINCIAL PARKS

ASPEN BEACH PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Gall aphids, <u>Adelges</u> sp.	W. spruce	Caused severe branch deformity on individual planted saplings.
Spider mite, <u>Oligonychus ununguis</u>	W. spruce	High population in densely branched trees.
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	Caused severe defoliation of several planted saplings.
Disease		
Cytospora canker, <u>Cytospora chrysosperma</u>	B. poplar	Cankers noted on exposed and weakened trees.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Cankers common on stems of mature trees.

BEAUVAIS LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Gall aphids, <u>Adelges</u> sp.	W. spruce	Individual fringe trees severely infested.
Budworm, <u>Choristoneura lambertiana</u>	Limber pine	Light defoliation along the north ridge.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Caused patchy light defoliation throughout the Park.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Continued activity noted in weakened trees along north side of the lake.
Disease		
Shoestring root rot, <u>Armillaria mellea</u>	T. aspen	Prolific in winter-damaged stands.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Numerous winter-damaged trees infected.

Winter damaged aspen	T. aspen	No additional damage. Mortality gradually occurring among trees severely damaged in past winters.
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BOW VALLEY PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
<u>Insect</u>		
Gall aphids, <u>Adelges</u> sp.	W. spruce	Branch tips of "preferred trees" severely galled.
Poplar serpentine miner, <u>Phyllocnistis populiella</u>	T. aspen	Caused moderate foliage discoloration.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Patchy, light defoliation.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Active in weakened, exposed trees.
<u>Disease</u>		
Shoestring root rot, <u>Armillaria mellea</u>	T. aspen D. fir Lp. pine	Common in roots of exposed fringe regeneration.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Noted numerous cankered fringe trees.

CHAIN LAKES PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Gall aphids, <u>Adelges</u> sp.	W. spruce	Numerous galls on individual open growing trees.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Caused light defoliation.
Disease		
Black rib of willow, <u>Ciborinia follicola</u>	Willow	Moderate leaf infection throughout the Park.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Cankers noted on weakened, exposed trees.
Leaf rust on willow, <u>Melampsora epitea</u>	Willow	Light infection in campground area.

CRIMSON LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Spruce gall aphid, <u>Adelges</u> sp.	W. spruce	Caused severe damage to individual fringe and open growing trees.
Leaf aphids, <u>Aphidae</u>	T. aspen	Numerous "open feeding" aphids on foliage in picnic area.

Root collar weevil, <u>Hylobius</u> sp.	W. spruce	Noted 2 completely girdled saplings.
Forest tent caterpillar, <u>Malacosoma disstria</u>	T. aspen	Larvae present in several locations in the Park.
Spruce spider mite, <u>Oligonychus ununguis</u>	W. spruce	Caused severe foliage damage to a few densely branched trees.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Moderate defoliation on fringe saplings.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Numerous weakened exposed trees infested.
Disease		
Shoestring root rot, <u>Armillaria mellea</u>	T. aspen	Causing severe mortality to mature trees in main campground.
Yellow witches' broom <u>Chrysomyxa arctostaphyli</u>	W. spruce	Rust brooms numerous throughout the Park.
Pine needle cast, <u>Elytroderma deformans</u>	Lp. pine	Perennial infections causing deformity of young trees.
Globose gall rust, <u>Endocronartium harknessii</u>	Lp. pine	Galls common on saplings throughout the Park.
White trunk rot, <u>Fomes igniarius</u>	T. aspen	A high percentage of mature trees infected.

CROSS LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Poplar serpentine miner, <u>Phyllocnistis populiella</u>	T. aspen	Light infestation.
Disease		
Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Low incidence.

Aspen leaf spot, <u>Ciborinia whetzellii</u>	T. aspen	Low incidence.
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Common on mature aspen.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Low incidence.
Balsam poplar leaf blight, <u>Linospora tetraspora</u>	B. poplar	Moderate infection.

CYPRESS HILLS PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Black-headed budworm, <u>Acleris variana</u>	W. spruce	Low population.
Spruce gall aphid, <u>Adelges lariciatus</u>	W. spruce	Common throughout Park.
Leaf roller, <u>Anacampsis innoculella</u>	T. aspen	Low population in Murray Hill area.
Spruce budworm, <u>Choristoneura fumiferana</u>	W. spruce	Low population in Battle Creek area. Defoliation generally light.
Lodgepole needle miner, <u>Coleotechnites starki</u>	Lp. pine	Low population.
Insect complex on spruce	W. spruce	Low population found in mass beating samples from this host. Combined feeding damage was light.
Spruce coneworm, <u>Dioryctria reniculella</u>		
A micro moth, <u>Griselda radicana</u>		
Spruce budmoth, <u>Zeiraphera fortunana</u>		
A tortricid, <u>Zeuraphera ratzeburgiana</u>		

American aspen beetle, <u>Gonioctena americana</u>	T. aspen	Moderate damage to young trees on fringe of aspen clones, light on mature trees.
Prairie tent caterpillar, <u>Malacosoma californicum lutescens</u>	Rose	Few tents generally throughout Park.
Poplar serpentine miner, <u>Phyllocnistis populiella</u>	T. aspen	Low population throughout Park.

Disease

Dwarf mistletoe, <u>Arceuthobium americanum</u>	Lp. pine	Considerable brooming along Grayburn Road and near the top of Ferguson Hill. Some tree and branch mortality.
Globose gall rust, <u>Endocronartium harknessii</u>	Lp. pine	High incidence on regeneration lodgepole pine in Ferguson Hill area. Common throughout Park.
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Low incidence.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Low incidence.

DILLBURY LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Leaf rollers, Undetermined sp.	T. aspen	Light injury recorded.

Disease

Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Few dead trees, light injury throughout Park.
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DINOSAUR PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Gall midge, <u>Rhabdophaga</u> sp.	Willow	Low incidence.

Leaf rollers
Undetermined sp.

Cottonwood

Low incidence.

Disease

No diseases recorded.

ENTRANCE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Spruce gall aphid, <u>Adelges cooleyi</u>	W. spruce	Light damage common. A few trees severely infested.
Gall aphid on conifers, <u>Adelges lariciatus</u>	W. spruce B. spruce	Low population throughout the Park.
Pine root collar weevil, <u>Hylobius</u> sp.	L. pine	Scattered mortality of regeneration pine.
Mourning cloak butterfly, <u>Nymphalis antiopa</u>	Willow B. poplar	Defoliated a few trees in scattered locations in the Park.
A leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Light foliage damage in the area.
Disease		
Shoestring root rot, <u>Armillaria mellea</u>	L. pine	Caused scattered mortality of regeneration pine.
Yellow witches' broom <u>Chrysomya arctostaphili</u>	B. spruce W. spruce	Brooms present throughout the the Park.
Spruce needle rust, <u>Chrysomya ledicola</u>	W. spruce	Many infections throughout the north end and in scattered locations in the southern portion.
Globose gall rust, <u>Endocronartium harknessii</u>	Lp. pine	Common throughout the Park.
Aspen shoot blight, <u>Venturia macularis</u>	T. aspen	Common throughout the Park.

GARNER LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce C. spruce	Moderate injury to a few 3 - 6 foot white spruce that had not been sprayed.
Poplar serpentine miner, <u>Phyllocnistis populiella</u>	T. aspen	Low population
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Numerous mature trees severely infested.
Disease		
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Conks on a high percentage of mature and overmature trees.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Moderate infection throughout Park.

GOOSEBERRY LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Light boring damage throughout Park.
Leaf rollers, Undertermined sp.	T. aspen	Light to moderate damage.
Disease		
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Few conks on mature trees throughout Park.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	High incidence of cankers on mature trees, particularly along main entrance road.

GREGOIRE LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

No insect infestations recorded.

Disease

White trunk rot, <u>Fomes igniarius</u>	T. aspen	Common throughout Park.
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HOMMY PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

Leaf tier, <u>Compsolechia niveopulvella</u>	T. aspen	Low population, light damage.
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American aspen beetle, <u>Gonioctena americana</u>	T. aspen	Low population on regeneration aspen.
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Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Moderate population throughout the Park.
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Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Low population of adult beetles.
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JARVIS BAY PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Caused light defoliation throughout the Park.
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Poplar borer, <u>Saperda calcarata</u>	T. aspen	Noted several infested mature trees.
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Disease

A witches' broom <u>Apiosporina collinsii</u>	Saskatoon	Infection severe along the bank above the lake shore.
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Black-knot of cherry, <u>Dibotryon morbosum</u>	Chokecherry	Common throughout the Park.
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White trunk rot, <u>Fomes igniarius</u>	T. aspen	A high percentage of mature trees infected.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Numerous declining mature trees infected.

KINBROOK ISLAND PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Spruce gall aphid, <u>Adelges cooleyi</u>	W. spruce	Moderate infestation.
Disease		
No diseases recorded.		

LAC CARDINAL PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Gall mite, <u>Eriophyidae</u>	T. aspen	Light damage to aspen foliage.
American aspen beetle, <u>Gonioctena americana</u>	T. aspen	Low population.
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	Moderate population on planted spruce.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Low population causing light damage.
Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Moderate population of adults on regeneration aspen.
Poplar borer, <u>Saperda calcarata</u>	T. aspen B. poplar	Light damage evident in semi-mature trees north of Headquarters site.
Disease		
Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Many of the planted spruce moderately infected.

Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Low incidence, some mortality to young trees.
Shoot blight of aspen, <u>Venturia macularis</u>	T. aspen	Low incidence on regeneration aspen.

LESSER SLAVE LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Aphids	B. poplar	High population on regeneration.
Ugly nest caterpillar, <u>Archips cerasivoranus</u>	Cherry	Low population at the south end of the Park.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	High population on mature aspen along the lake shore.
Disease		
Dwarf mistletoe, <u>Arceuthobium americanum</u>	J. pine	Heavy infection on a few trees in the Martin River Campsite and also a few trees near the southeast end of the Park.
Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Scattered light to moderate infection throughout the Park.
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Common throughout the Park.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	A few cankers present.
Balsam poplar leaf blight, <u>Linospora tetraspora</u>	B. poplar	Common throughout the Park.
Tar spot, <u>Rhytisma salicinum</u>	Willow	Common throughout the Park.
Aspen shoot blight, <u>Venturia macularis</u>	T. aspen	Scattered light damage.

LITTLE BOW PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
No infestations recorded		

Disease

Die back	Russian poplar	Samples were checked at the laboratory but no disease was found and cause of die back was not determined. More samples will be taken in 1974.
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LITTLE FISH PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

No infestations recorded.

Disease

Die back	R. elm W. birch	Probably climatic damage.
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LONG LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

Spruce gall aphid, <u>Adelges species</u>	W. spruce	Low incidence.
American aspen beetle, <u>Gonioctena americana</u>	T. aspen	Moderate in overflow camping area
Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Low population.

Disease

Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Low incidence.
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Low incidence.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Campground area.

MIQUELON LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Yellow-headed spruce sawfly, W. spruce <u>Pikonema alaskensis</u>		Very light damage.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Low incidence.
Disease		
Apiosporina witch's broom, <u>Apiosporina collinsii</u>	Saskatoon	Moderate infection in north campground area.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Low incidence.
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Numerous conks on mature trees and on some suppressed trees.

MOONSHINE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Black-headed budworm, <u>Acleris variana</u>	W. spruce	Low population.
Large aspen tortrix, <u>Choristoneura conflictana</u>	T. aspen	Low population. No damage evident.
Leaf tier, <u>Compsolechia niveopulvella</u>	T. aspen	Light defoliation.
American aspen beetle, <u>Gonioctena americana</u>	T. aspen	Caused considerable defoliation of small aspen.
Oregon fir sawyer, <u>Monochamus oregonensis</u>	W. spruce	Low population present.
Leaf beetle, <u>Orsodacne atra</u>	T. aspen	Low population.
Poplar serpentine miner, <u>Phyllocnistis populiella</u>	T. aspen	Low population.
Yellow-headed spruce sawfly, W. spruce <u>Pikonema alaskensis</u>		High population causing moderate to severe defoliation of open growing spruce.

Disease

Poor condition of pine

Scots pine

Many of 1973 plantings in poor condition. Many 15 - 20 foot pine also in poor condition due to shading by overstory of poplars.

PEMBINA RIVER PARK

Organism

Host

Remarks

Insect

Spruce gall aphid,
Adelges cooleyi

W. spruce
C. spruce

Moderate numbers of galls present on open growing spruce.

Gall aphid on conifers,
Adelges lariciatus

W. spruce
C. spruce

Low numbers of galls present.

Forest tent caterpillar,
Malacosoma disstria

T. aspen

Low population present.

Pitch nodule maker,
Petrova albicapitana

Pine

Scattered twig damage.

Yellow headed spruce sawfly,
Pikonema alaskensis

W. spruce

Low population present, high defoliation of a few trees.

Grey willow leaf beetle,
Pyrrhalta decora

T. aspen

Moderate leaf damage to regeneration aspen around the administration site.

Spruce bud midge,
Rhabdophaga swainei

W. spruce

Low population present.

Poplar borer,
Saperda calcarata

T. aspen

Light damage common. Heavy infestation on aspen near the Park entrance.

Disease

Shoestring root rot,
Armillaria mellea

Lp. pine

One dead tree infected with this disease.

Spruce needle rust,
Chrysomyxa ledicola

W. spruce
C. spruce

Moderate infection of a few trees.

Leaf tier,
Pseudexentera oregonana

T. aspen

Low population.

Disease

Apiosporina witches'
Apiosporina collinsii

Saskatoon

Low incidence.

Poplar ink spot,
Ciborinia whetzellii

T. aspen

A few individual trees
with light infection.

White trunk rot,
Fomes igniarius

T. aspen

Low incidence, Only a few
conks observed.

Hypoxylon canker,
Hypoxylon mammatum

T. aspen

Light infection causing some
mortality to young aspen.

Spruce needle rust,
Chrysomyxa ledicola

W. spruce

Regeneration spruce
moderately infected.

Shoot blight of aspen,
Venturia macularis

T. aspen

Caused considerable shoot
damage to regeneration aspen.

O'BRIEN PARK

Organism

Host

Remarks

Insect

Gall aphid,
Pemphigus sp.

B. poplar

High population throughout
the Park.

Leaf tier,
Pseudexentera oregonana

T. aspen

Low on aspen regeneration.

Gall midge,
Rhodbophaga swainei

W. spruce

High population on small
spruce.

Disease

Spruce needle rust,
Chrysomyxa ledicola

W. spruce

Low incidence on planted spruce.

PARK LAKE PARK

Organism

Host

Remarks

Insect

Spruce gall aphid,
Adelges cooleyi

W. spruce

Severe on trees near
headquarters.

White trunk rot, <u>Fomes igniarius</u>	T. aspen	Conks present on numerous dead and dying trees throughout the Park.
Hypoxyton canker of aspen, <u>Hypoxyton mammatum</u>	T. aspen	A few cankers caused by this disease.
Leaf and twig blight of poplar, <u>Venturia macularis</u>	T. aspen	Light shoot damage.
Birch dieback	Birch	Common in the Park, no evidence of fungus present.

PIGEON LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Leaf aphids, <u>Aphidae</u>	B. poplar	Numerous "open feeding" aphids noted on the foliage of large trees.
American aspen beetle, <u>Gonioctena americana</u>	T. aspen	Low population.
Forest tent caterpillar, <u>Malacosoma disstria</u>	T. aspen	A few larvae present.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Caused patchy, light defoliation.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Infested trees common in the Park.
Disease		
Cytospora canker, <u>Cytospora chrysosperma</u>	B. poplar	Cankers observed on exposed saplings.
Hypoxyton canker, <u>Hypoxyton mammatum</u>	T. aspen	Cankers common on stems of mature trees.

ROCHON SANDS PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

Poplar bud gall mite, <u>Aceria parapopuli</u>	T. aspen	Light
Gall mite, <u>Eriophyes</u>	T. aspen	Light
Leaf roller, <u>Pandemis canadana</u>	T. aspen	Light.
Sawfly, <u>Phyllocalpa nr. robusta</u>	T. aspen	Light.

Disease

White trunk rot, <u>Fomes igniarius</u>	T. aspen	Numerous dead trees.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Moderate infection.

SASKATOON ISLAND PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
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Insect

Leaf tier, <u>Compsolechia niveopulvella</u>	T. aspen	Low population causing light damage.
Bruce spanworm, <u>Operophtera bruceata</u>	T. aspen	Low population.
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	Light damage.
Leaf tier, <u>Pseudexentera oregonana</u>	T. aspen	Medium population causing considerable damage to regeneration aspen.
Gall midge, <u>Rhabdophaga swainel</u>	W. spruce	Low population

Disease

Apiosporina witches' broom, <u>Apiosporina collinsii</u>	Saskatoon	Low incidence - only a few brooms evident.
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Shoestring root rot, <u>Armillaria mellea</u>	T. aspen	High infection in area east of parking lot on dead or dying mature trees.
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Disease

Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Light infection on planted
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Light infection. Only a few conks noted.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Light infection, low mortality.
Aspen shoot blight, <u>Venturia macularis</u>	T. aspen	Light damage to regeneration aspen

SIR WINSTON CHURCHILL PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Birch skeletonizer, <u>Bucculatrix canadensisella</u>	Birch	Light infestation.
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	Low population.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	Low population.

Disease

Apiosporina witches' broom, <u>Apiosporina collinsii</u>	Saskatoon	Light infection
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Only a few conks but numerous dead trees.
Balsam poplar leaf blight, <u>Linospora tetraspora</u>	B. poplar	Moderate infection

THE VERMILION PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Large aspen tortrix, <u>Choristoneura conflictana</u>	T. aspen	Light

Poplar borer, <u>Saperda calcarata</u>	T. aspen	Light.
Disease		
Apiosporina witches' broom, <u>Apiosporina collinsii</u>	Saskatoon	Low incidence.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Numerous old dead infected trees. Infection low on living trees.

THUNDER LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Poplar bud-gall mite, <u>Aceria parapopuli</u>	T. aspen	A few galls present in the Park.
Cooley spruce gall aphid, <u>Adelges cooleyi</u>	Spruce	High population on a few planted spruce.
Spruce gall aphid, <u>Adelges lariciatus</u>	Spruce	Present on a few planted trees.
Aphids,	B. poplar	High populations on regeneration.
Forest tent caterpillar, <u>Malacosoma disstria</u>	T. aspen	Low population present. Egg band sampling indicated low populations for 1974.
Poplar leaf petiole gall mite, <u>Pemphigus</u> sp.	B. poplar	Numerous galls present.
Yellow headed spruce sawfly, <u>Pikonema alaskensis</u>	Spruce	Low to moderate populations on planted spruce. High population caused severe defoliation of black spruce in a muskeg area within the Park.
Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Light leaf damage on regeneration aspen.
Poplar borer, <u>Saperda calcarata</u>	T. aspen	High population present. Some top die-back has occurred.

Disease

White trunk rot, <u>Fomes igniarius</u>	T. aspen	Present in the larger aspen.
Hypoxylon canker of aspen, <u>Hypoxylon mammatum</u>	T. aspen	Aspen is severely infected throughout the Park. Numerous trees were recently killed.
Leaf and twig blight of poplar, <u>Venturia macularis</u>	T. aspen	Scattered damage on regeneration.

WABAMUN LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Black headed budworm, <u>Acleris variana</u>	W. spruce	Low population present.
Gall aphid on conifer, <u>Adelges lariciatus</u>	W. spruce B. spruce	Moderate damage to a few trees.
A flea beetle, <u>Altica populi</u>	B. poplar	Low population present.
Forest tent caterpillar, <u>Malacosoma disstria</u>	T. aspen	Low population throughout the Park. No notable defoliation.
Spruce spider mite, <u>Oligonychus ununguis</u>	W. spruce	Low population throughout the Park.
Poplar serpentine miner, <u>Phyllocnistis populiella</u>	T. aspen	Light damage present.
Yellow headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	Low population present.
Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Light damage to regeneration aspen.
Disease		
White trunk rot, <u>Fomes igniarius</u>	T. aspen	Heavy infection throughout the Park. Numerous dead trees and dead tops present.

Hypoxylon canker of aspen,
Hypoxylon mammatum

T. aspen

Numerous cankers present.
Scattered mortality.

WILLIAMSON PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Black-headed budworm, <u>Accleris variana</u>	W. spruce	Low on spruce in camping area.
Leaf tiers, <u>Compsolechia niveopulvella</u> <u>Pseudexentera oregonana</u>	T. aspen	Low population causing light damage.
Bruce spanworm, <u>Operophtera bruceata</u>	T. aspen	Low populations, no noticeable damage.
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	Medium population causing moderate damage.
Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Low population.
Gall midge, <u>Rhabdophaga swainei</u>	W. spruce	Light damage on a few trees.
Disease		
Apiosporina witches' broom, <u>Apiosporina collinsii</u>	Saskatoon	A few scattered brooms.
Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Moderate infection on spruce in camping area.
White trunk rot, <u>Fomes ignarius</u>	T. aspen	Found throughout the Park.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Low incidence.
Shoot blight of aspen, <u>Venturia macularis</u>	T. aspen	Light damage to regeneration aspen.

WINAGAMI LAKE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Black-headed budworm, <u>Acleris variana</u>	W. spruce	Light damage.
Leaf tiers, <u>Compsolechia niveopulvella</u> <u>Pseudexentera oregonana</u>	T. aspen	Low population causing light damage.
Bruce spanworm, <u>Operophtera bruceata</u>	T. aspen	Low population.
Yellow-headed spruce sawfly, <u>Pikonema alaskensis</u>	W. spruce	High population, causing severe damage to open-growing spruce.
Grey willow leaf beetle, <u>Pyrrhalta decora</u>	T. aspen	Low population.
Gall midge, <u>Rhabdophaga swainei</u>	W. spruce	Light damage.
Disease		
Spruce needle rust, <u>Chrysomyxa ledicola</u>	W. spruce	Moderate infection on spruce in picnic area.
Hypoxylon canker, <u>Hypoxylon mammatum</u>	T. aspen	Light infection.
Shoot blight of aspen, <u>Venturia macularis</u>	T. aspen	Light damage to regeneration aspen.

WRITING ON STONE PARK

<u>Organism</u>	<u>Host</u>	<u>Remarks</u>
Insect		
Gall mite, <u>Eriophyidae</u>	Willow	Light.
Prairie tent caterpillar, <u>Malacosoma californicum</u> <u>lutescens</u>	Rose	Few tents throughout Park. (sprayed)

WRITING ON STONE PARK (Cont.)

Gall aphid, <u>Pemphigus</u> sp.	Poplar	Few galls generally.
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Willow cone gall midge, <u>Rhabdophaga strobiloides</u>	Willow	Few galls.
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Disease

None recorded.