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Status of Insects in Kemptville  
District

Applejohn, M.J.

Information Report O-X-59  
(Forest Research Laboratory, Ontario Region)

1967

Information Report No.	Subject	Author
O-X-57	Forest Insect & Disease Surveys --Lindsay District	M. J. Thomson
O-X-58	--Tweed District	F. Livesey
O-X-59	--Kemptville District	M. J. Applejohn
O-X-60	--Lake Simcoe District	R. L. Bowser
O-X-61	--Lake Erie District	G. T. Atkinson
O-X-62	--Lake Huron District	V. Jansons
O-X-63	--North Bay District	L. S. MacLeod
O-X-64	--Parry Sound District	C. A. Barnes
O-X-65	--Pembroke District	R. A. Trieselmann
O-X-66	--Sault Ste. Marie District	H. J. Weir
O-X-67	--Sudbury District	G. W. Cameron
O-X-68	--Chapleau District	D. Ropke
O-X-69	--Gogama District	W. Ingram
O-X-70	--Cochrane District	H. R. Foster
O-X-71	--Kapuskasing District	F. F. Foreman
O-X-72	--Swastika District	H. R. Foster L. S. MacLeod W. Ingram
O-X-73	--Port Arthur District	K. C. Hall
O-X-74	--Geraldton District	K. C. Hall D. C. Constable
O-X-75	--White River District	D. C. Constable
O-X-76	--Sioux Lookout District	P. E. Buchan
O-X-77	--Kenora District	P. E. Buchan J. Hook
O-X-78	--Fort Francis District	J. Hook

# TABLE OF CONTENTS

## REPORTS OF FOREST RESEARCH TECHNICIANS

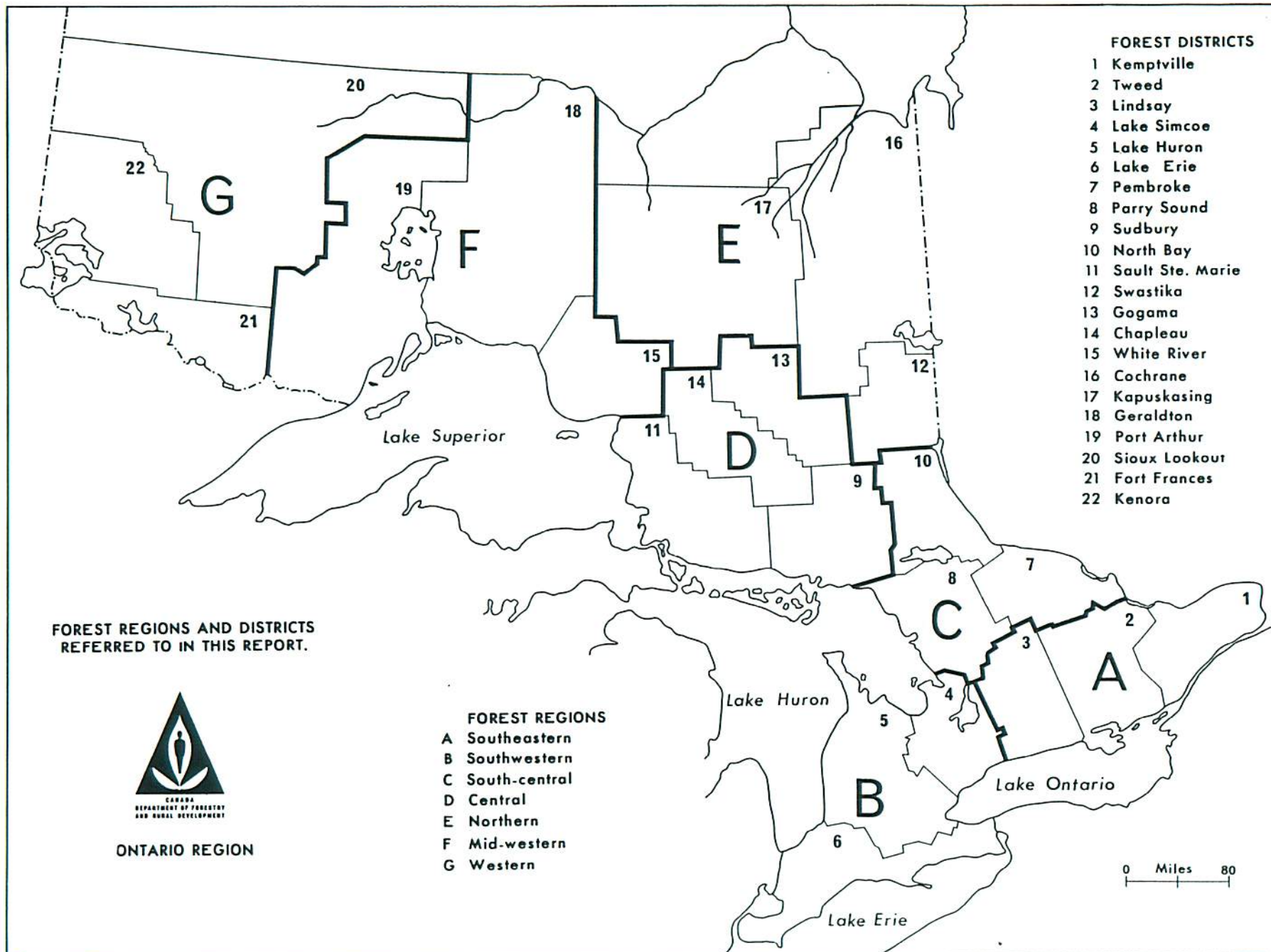
### Ontario

	Page
Foreword, J. E. MacDonald	
A. <u>SOUTHEASTERN FOREST REGION</u>	<u>A1-51</u>
Lindsay District, M.J. Thomson* .....	A 8
Tweed District, F. Livesey .....	A 19
Kemptonville District, M.J. Applejohn .....	A 36
B. <u>SOUTHWESTERN FOREST REGION</u>	<u>B1-46</u>
Lake Simcoe District, R.L. Bowser* .....	B 9
Lake Erie District, G.T. Atkinson .....	B 24
Lake Huron District, V. Jansons .....	B 36
C. <u>SOUTH-CENTRAL FOREST REGION</u>	<u>C1-49</u>
North Bay District, L.S. MacLeod* .....	C 8
Parry Sound District, C.A. Barnes .....	C 19
Pembroke District, R.A. Trieschmann .....	C 33
D. <u>CENTRAL FOREST REGION</u>	<u>D1-49</u>
Sault Ste. Marie District, H.J. Weir* .....	D 7
Sudbury District, G. Cameron .....	D 21
Chapleau District, D. Ropke .....	D 27
Gogama District, W. Ingram .....	D 34
E. <u>NORTHERN FOREST REGION</u>	<u>E1-45</u>
Cochrane District, H.R. Foster* .....	E 12
Kapuskasing District, F. Foreman .....	E 25
Swastika District, H.R. Foster, L.S. MacLeod, W. Ingram .....	E 36
F. <u>MIDWESTERN FOREST REGION</u>	<u>F1-27</u>
Fort Arthur District, K.C. Hall* .....	F 7
Geraldton District, K.C. Hall, D. Constable .....	F 14
White River District, D. Constable .....	F 19
G. <u>WESTERN FOREST REGION</u>	<u>G1-36</u>
Sioux Lookout District, P.E. Buchan* .....	G 11
Kenora District, P.E. Buchan, J. Hook .....	G 20
Fort Frances District, J. Hook .....	G 29

Photographs

Regional Supervisors \*





## FOREWORD

Population levels of the spruce budworm increased sharply in widely-separated parts of Ontario in 1967. Heavy infestations occurred in the Burchell Lake area in Port Arthur District and in woodlots in parts of Pembroke, Tweed and Kemptville districts. A light infestation persisted east of Chapleau in the Central Forest Region. The Burchell Lake infestation is of particular concern because of the nature of the forest in that area. Stands currently infested, as well as those to the north as far as Lac Des Mille Lacs, contain considerable mature balsam fir and white spruce which are highly susceptible to attack by the spruce budworm.

For the second consecutive year, weather conditions during May had a pronounced effect on infestations of the forest tent caterpillar. Mortality of eggs and newly-emerged larvae greatly reduced population levels of this pest. The only major areas of infestation remaining in the Province were in the eastern part of Fort Frances District and the southern part of Sault Ste. Marie District.

Two species of sawflies were of major importance in pine plantations. The European pine sawfly continued to extend its range in southeastern Ontario and two new centers of infestation were found on Manitoulin Island. The red-headed pine sawfly caused severe defoliation in red pine shelterbelts and plantations at numerous locations in the central and southern parts of the Province.

Intensive surveys were continued to determine the distribution and incidence of Dutch elm disease and Scleroderris-canker of pine. The discovery of Ceratocystis ulmi (Buism.) C. Moreau in Sault Ste. Marie constituted a marked westward extension of the range of the disease caused by this pathogen. Scleroderris-canker of pine continued to cause severe losses of young red pine and, to a lesser extent, jack pine in numerous plantations in central and northern Ontario. By comparison, damage in southern Ontario was negligible.

Diseases of spruce were caused by Cytospora kunzei Sacc. and Polyporus tomentosus Fr. at widely-separated points in southern Ontario and pockets of infection of Fomes annosus (Fr.) Cke. root-rot persisted in several red pine plantations in Lindsay, Lake Simcoe and Lake Erie districts. Details on the distribution and damage caused by these and other forest diseases and insects are contained in the regional and district sections of this report.

J. E. MacDonald



# STATUS OF INSECTS IN KEMPTVILLE DISTRICT

	Page
Ugly-nest Caterpillar .....	<u>Archips cerasivoranus</u> A 36
Spruce Budworm .....	<u>Choristoneura fumiferana</u> A 36
Larch Casebearer .....	<u>Coleophora laricella</u> A 36
Lace Bugs .....	<u>Corythucha</u> spp. and <u>Gargaphia tiliae</u> A 37
Nursery Pine Sawfly .....	<u>Diprion frutetorum</u> A 37
European Spruce Sawfly .....	<u>Diprion hercyniae</u> A 38
Eastern Pine Shoot Borer .....	<u>Eucosma gloriola</u> A 38
Pine Bud Moth .....	<u>Exoteleia dodecella</u> A 39
Birch Leaf Miner .....	<u>Fenusa pusilla</u> A 39
Fall Webworm .....	<u>Hyphantria cunea</u> A 40
The Solitary Oak Leaf Miner .....	<u>Lithocolletis hamadryadella</u> A 40
Eastern Tent Caterpillar .....	<u>Malacosoma americanum</u> A 41
Forest Tent Caterpillar .....	<u>Malacosoma disstria</u> A 41
Cedar Sawfly .....	<u>Monoctenus fulvus</u> A 42
Balsam Fir Sawfly .....	<u>Neodiprion abietis</u> complex A 43
Red-headed Pine Sawfly .....	<u>Neodiprion lecontei</u> A 43
A Jack-pine Sawfly .....	<u>Neodiprion pratti paradoxicus</u> A 44
Spring and Fall Cankerworms.....	<u>Paleacrita vernata</u> and <u>Alsophila pometaria</u> A 44
Yellow-headed Spruce Sawfly .....	<u>Pikonema alaskensis</u> A 44
White-pine Weevil .....	<u>Pissodes strobi</u> A 44
Imported Willow Leaf Beetle .....	<u>Plagioderma versicolora</u> A 45
Larch Sawfly .....	<u>Pristiphora erichsonii</u> A 45
Mountain-ash Sawfly .....	<u>Pristiphora geniculata</u> A 45
Elm Bark Beetles .....	<u>Scolytus multistriatus</u> and <u>Hylurgopinus rufipes</u> A 45
Summary of Miscellaneous Insects .....	A 46

M. J. Applejohn



Ugly-nest Caterpillar, Archips cerasivoranus (Fitch)

Little change occurred in population levels of this insect in 1967 (Table 4). Heavy infestations were noted on roadside choke cherry near Kinburn in Huntley Township and near Appleton in Ramsay Township. A light infestation occurred on black ash in South Crosby Township. Elsewhere only occasional nests were found.

TABLE 4

Summary of Ugly Nest Caterpillar Colony Counts in Kemptville District in 1966 and 1967

Location (township)	No. of tents per mile of roadside	
	1966	1967
Beckwith	11	5
Montague	13	10
Nepean	20	0
North Crosby	4	1
Oxford	15	19
South Sherbrooke	15	11
Wolford	6	11

Spruce Budworm, Choristoneura fumiferana (Clem.)

A heavy infestation, approximately five square miles in extent, occurred south of Antrim in Fitzroy and Huntley townships. This area was surrounded by light infestation encompassing an additional twenty square miles (see map). Small pockets of heavy infestation occurred near Poland and McDonald's Corners in Dalhousie Township and northeast of Wilbur in Lavant Township. Low numbers of larvae were encountered in most white spruce stands sampled in Lavant, Darling, Pakenham and Dalhousie townships in the north part of Lanark County.

Sequential sampling of egg masses in the fall of 1967 indicated that heavy infestations will occur in Huntley and Fitzroy townships and light-to-medium infestations will occur in Goulbourn, March, Lavant, and Dalhousie townships in 1968.

Larch Casebearer, Coleophora laricella (Hbn.)

Very little change in numbers of the larch casebearer occurred in 1967. Populations have remained at a low level for the past several years and only minor fluctuations have been recorded at sample points (Table 5).

TABLE 5

Summary of Larch Casebearer Larval Counts in the Kemptville District from 1965 to 1967

Location (township)	Av. d.b.h. of sample trees in inches	Av. no. of larvae per 18-inch branch tip		
		1965	1966	1967
Dalhousie	4	0.5	3.7	4.1
Montague	3	9.2	10.3	8.9
Oxford	4	2.0	3.4	9.5
N. Plantagenet	4	1.6	3.4	4.5

Lace Bugs Corythucha spp. and Gargaphia tiliae Walsh

These insects caused severe browning and premature leaf drop of elm, oak, and butternut foliage along Highway 17 in Prescott and Russell counties. Severe browning of elm foliage also occurred south of Ottawa in Gloucester and Osgoode townships, and along Highway 7 between Perth and Carleton Place. Light damage was noted on basswood at Westport in North Crosby Township and on bur oak at Chaffey's Locks in South Crosby Township. Low populations were encountered on various hardwood species at numerous other locations in the district.

The species collected included: Gargaphia tiliae Walsh, Corythucha ulmi O. & D., C. arcuata (Say), C. pergandei Heid. and C. juglandis Fitch.

Nursery Pine Sawfly, Diprion frutetorum (F.)

This insect was found in small numbers throughout the district. Six permanent sample points were established to assess larval populations (Table 6).

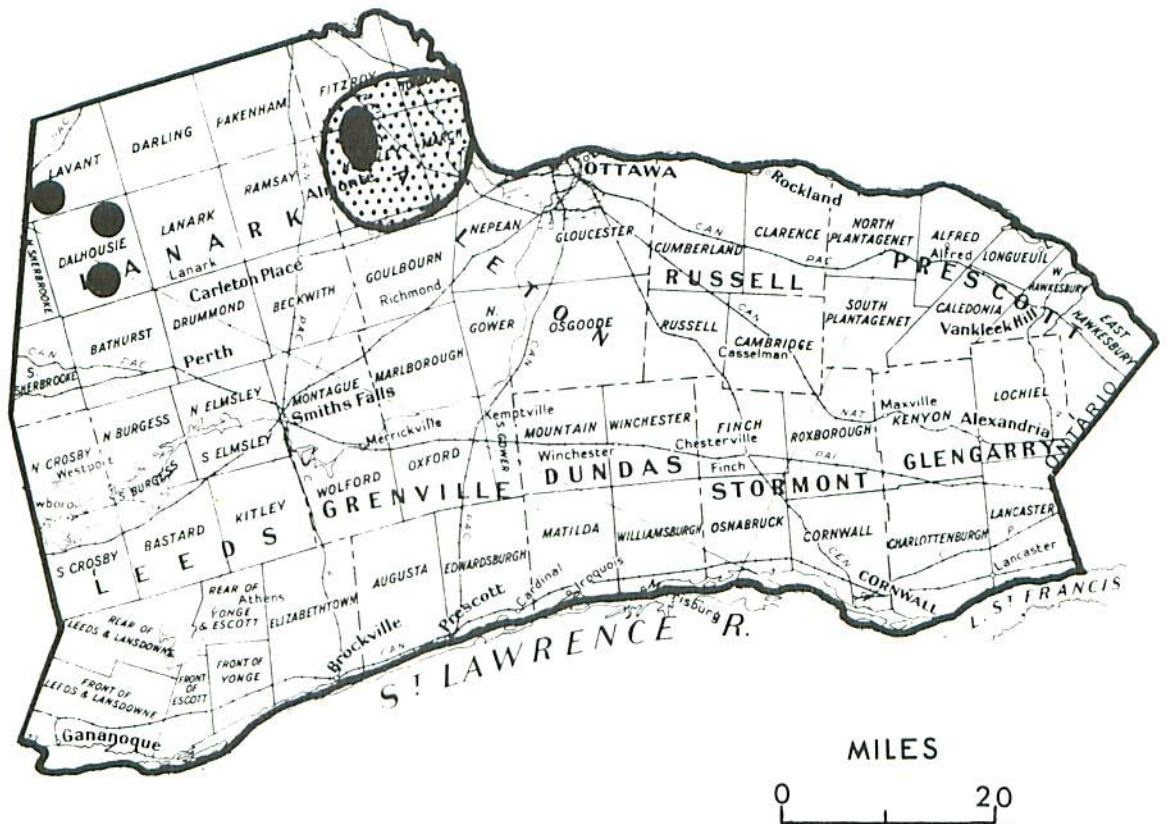
TABLE 6

Summary of Nursery Pine Sawfly Larval Counts in Kemptville District in 1967

Location (township)	Av. d.b.h. of sample trees in inches	No. of larvae per 15-tray sample
Marlborough	4	40
Goulbourn	6	10
Oxford	4	15
Winchester	5	3
Beckwith	3	4
Bathurst	4	1





# KEMPTVILLE DISTRICT



## SPRUCE BUDWORM

Areas where infestations occurred  
in 1967

Legend

Light infestation.....  
Medium-to-heavy infestation..

European Spruce Sawfly, Diprion hercyniae (Htg.)

A general increase in numbers of this insect was recorded in 1967 (Table 7). A medium infestation caused noticeable defoliation in North Plantagenet Township where 158 larvae were counted on a 15-tray sample. Light infestations occurred near Point Fortune in East Hawkesbury Township and near Long Sault in Cornwall Township. Small numbers of larvae were found in beating samples on spruce trees in the remainder of the district.

TABLE 7

Summary of European Spruce Sawfly Larval Counts in the Kemptville District in 1966 and 1967

Location (township)	Av. d.b.h. of sample trees in inches	No. of larvae per 15-tray sample	
		1966	1967
Beckwith	10	1	15
Cambridge	5	0	7
Oxford	5	2	12
Ramsay	5	0	20
South Crosby	5	2	29
North Plantagenet	6	-	158

Eastern Pine Shoot Borer, Eucosma gloriola Heinr.

Small numbers of this insect were found in red, white, and Scots pine plantations throughout the district. Populations were highest in Beckwith Township where 256 lateral shoots were infested on 100 trees examined. Quantitative sample points were established at four locations to assess population levels (Table 8).

TABLE 8

Summary of Eastern Pine Shoot Borer Damage in the Kemptville District in 1967

Location (township)	Host	Av. d.b.h. of sample trees in inches	No. of trees examined	No. of leaders infested	No. of laterals infested
Matilda	wP	2	100	12	9
Wolford	wP	3	100	5	14
Cambridge	rP	2	100	1	12
Beckwith	ScP	3	100	0	256



Pine Bud Moth, Exoteleia dodecella Linn.

A general increase in populations of this insect occurred in 1967. Small numbers of larvae were found on Scots pine at five permanent sample points where negative results were obtained in 1966 (Table 9). A light infestation occurred in Cumberland Township where 13 per cent of the bud clusters examined were infested. Low populations were observed in host stands in the remainder of the district.

TABLE 9

Summary of Pine Bud Moth Counts in the Kemptville District in 1966 and 1967

Note: Counts were based on examination of fifty bud clusters from each of four Scots pine trees at each location.

Location (township)	Av. d.b.h. of sample trees in inches	No. of bud clusters infested		Per cent of bud clusters infested	
		1966	1967	1966	1967
Oxford	4	0	6	0	3.0
Kitley	3	0	5	0	2.5
Goulbourn	4	0	3	0	1.5
Cumberland	3	0	26	0	13.0
Wolford	4	0	10	0	5.0

Birch Leaf Miner, Fenusa pusilla (Lep.)

Heavy infestations of this leaf miner persisted for the fourth consecutive year. Severe browning of white and wire birch foliage occurred in Prescott, Russell, Dundas, Stormont, Glengarry, Grenville, and the eastern parts of Carleton and Leeds counties. A small pocket of heavy infestation occurred in South Sherbrooke Township, Lanark County (see map). The second generation was considerably reduced in numbers, probably due to a scarcity of oviposition sites resulting from the extensive damage caused by the first generation. Results obtained at quantitative sample points at five locations are summarized in Table 10.

TABLE 10

Summary of Damage Caused by the First Generation of the Birch Leaf Miner in the Kemptville District in 1967

Note: Counts were based on examination of 100 leaves taken at random from three trees at each location.

Location (township)	Host	Av. d.b.h. of sample trees in inches	Per cent of leaves infested	Total no. of mines
Elizabethtown	wB	4	99	215
East Hawkesbury	wiB	3	92	183
Williamsburg	wiB	2	91	228
Cambridge	wiB	3	100	237
Oxford	wB	3	93	218

Fall Webworm, Hyphantria cunea (Drury)

Populations of this insect remained virtually unchanged in 1967. Two pockets of medium infestation occurred on the north shore of the St. Lawrence River, east of Prescott in Edwardsburgh Township, and near Summerstown in Charlottenburgh Township. Small numbers of tents were observed commonly in the remainder of the district (Table 11).

TABLE 11

Summary of Fall Webworm Counts in Kemptville District in 1967

Location (township)	Host	No. of tents per mile of roadside
Osnabruck	wE	18
Edwardsburgh	wAs	23
South Gower	tA	3
Wolford	buckthorn	5
Fitzroy	wE	3
Cornwall	wE	18

The Solitary Oak Leaf Miner, Lithocolletis hamadryadella Clem.

Heavy infestations of this leaf miner caused severe browning of white and bur oak foliage in Beckwith, Kitley and Elizabethtown townships. Medium infestations occurred in Drummond, Front of Yonge, North Crosby, Lansdowne, and North Burgess townships. Most white and bur oak stands in the remainder of the district were lightly infested.



Trees ranging from 15 to 80 feet in height were attacked. At one location in Kitley Township, the trunks in a stand of 60-foot bur oak trees were completely white with resting adults.

Eastern Tent Caterpillar, Malacosoma americanum (F.)

A general upward trend in populations of this defoliator was reflected in results obtained at eight of nine sampling stations (Table 12). Medium to heavy infestations occurred in Drummond, Montague, North Elmsley, and Alfred townships. Tents were noted commonly on hedgerows, ornamental shrubbery, and in orchards throughout the district.

TABLE 12

Summary of Eastern Tent Caterpillar Colony Counts in the Kemptville District in 1966 and 1967

Location (township)	No. of tents per mile of roadside	
	1966	1967
Bathurst	37	68
Beckwith	23	70
Drummond	193	243
Goulbourn	19	30
Kitley	60	27
Ianark	11	57
Montague	53	100
North Elmsley	30	179
Oxford	69	72

Forest Tent Caterpillar, Malacosoma disstria Hbn.

Warm weather in late April of 1967 caused forest tent caterpillar eggs to hatch as early as May 1. Unseasonably cold weather followed in May with hard frosts occurring on eight days as late as May 23. This delayed the flushing of trembling aspen foliage and many young larvae starved. Thus, in spite of an excellent egg hatch as shown in Table 13, the heavy infestations forecast on the basis of egg densities in Carleton, Russell, Dundas, and Prescott counties did not materialize. Two small pockets of heavy infestation persisted in Clarence Township just south of Rockland and several miles northeast of Bourget. These pockets of heavy infestation were surrounded by a larger area of light infestation (see map). Another small pocket of heavy infestation occurred near the village of Finch in Finch Township where scattered open-grown oak trees were severely defoliated. A small area of light infestation also persisted between Buckhams Bay and Constance Bay in Torbolton Township. Occasional colonies and wandering larvae were found at numerous other locations.

This is a detailed map of the County of Lanark, showing its various townships and locations. The map includes a compass rose in the lower-left corner and a scale bar in miles (0 to 20) in the lower-right corner. The county is bordered by the St. Lawrence River to the south. Townships shown include Lanark, Russell, Dundas, Stormont, Grenville, and Glengarry. Major locations like Perth, Carleton Place, and Kingston are marked.

Heavy infestation



Surveys carried out at two locations showed that adults emerged from nineteen per cent of the cocoons examined. The main cause of mortality in both cases was parasitism (Table 13). On the basis of egg band counts made at six locations in September, no major infestations are predicted for 1968. Results were negative except in Torbolton and Clarence townships where 1 egg band was found at each sample location.

TABLE 13

Summary of Forest Tent Caterpillar Egg Band Dissections in the Kemptville District in 1967

Location (township)	No. eggs emerged	No. eggs where emergence failed	No. eggs diseased	No. eggs sterile	No. eggs parasit- ized	Total no. eggs	Per cent of eggs hatched
Huntley	1653	729	13	225	80	2700	61.2
March	1225	226	3	163	14	1631	74.6
Fitzroy	653	341	10	97	10	1291	50.5
Cumberland	815	150	88	33	6	1122	72.5
Clarence	616	215	49	24	19	923	66.7

TABLE 14

Summary of Forest Tent Caterpillar Cocoon Dissections in the Kemptville District in 1967

Location (township)	No. cocoons examined	No. of adults	Mortality			Quest- ionable
			Disease	Predation	Parasitized	
Torbolton	100	5	7	12	73	3
Clarence	100	19	6	6	66	3

Cedar Sawfly, Monoctenus fulvus Nort.

Population levels of this sawfly increased slightly in 1967. Light infestations were recorded in Dalhousie, South Sherbrooke, and Ramsay townships. Three new sample points were established in 1967 to show population trends (Table 15).

TABLE 15

Summary of Cedar Sawfly Larval Counts in Kemptville District in 1966  
and 1967

Location (township)	Av. d.b.h. of sample trees in inches	Total no. of larvae per 15-tray sample	
		1966	1967
Beckwith	3	24	22
Goulbourn	4	2	12
Huntley	4	21	17
Oxford	5	23	11
Ramsay	4	14	53
Dalhousie	4	--	80
South Sherbrooke	3	--	72
Bastard	6	--	32

Balsam Fir Sawfly, Neodiprion abietis complex

A major increase in population levels of this insect was evident in 1967. Small pockets of heavy infestation occurred in Pakenham, Torbolton, South Sherbrooke, and Cumberland townships. Medium infestations were noted in North Plantagenet and Oxford townships. A light infestation occurred in Drummond Township. Small numbers of larvae were collected on mat samples from balsam fir in the remainder of the district.

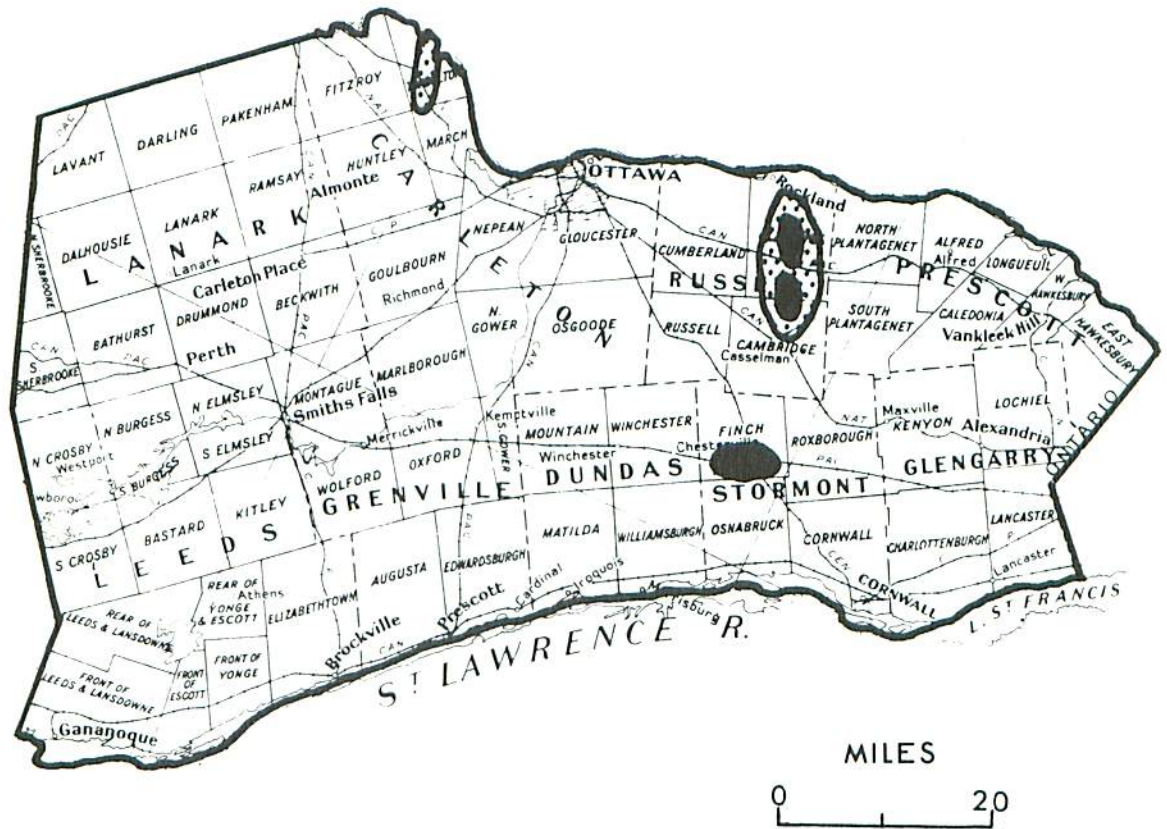
Red-headed Pine Sawfly, Neodiprion lecontei (Fitch.)

Although not reflected in counts made at six permanent sample points, a general increase in numbers of this defoliator occurred in 1967 (Table 16). Heavy infestations occurred on red pine plantings in Dalhousie, South Gower, South Plantagenet, and Oxford townships. In Oxford Township, severe mortality of 10-to-15-foot red pine occurred in one plantation. Medium infestations were noted in Kitley, South Burgess, Darling, and Lavant townships. Scattered colonies were widely-distributed in red and jack pine plantations in the remainder of the district.

As in previous years, the Department of Lands and Forests carried out a control program in the Larose and Limerick Forests, using DDT and portable pack sprayers. This action prevented serious defoliation in the treated areas.



# KEMPTVILLE DISTRICT



## FOREST TENT CATERPILLAR

Areas where infestations occurred  
in 1967

### Legend



Light infestation .....   
Heavy infestation ..... 

TABLE 16

Summary of Red-headed Pine Sawfly Colony Counts in the Kemptville District in 1966 and 1967

Location (township)	Host	Av. d.b.h. of sample trees in inches	No. of trees examined in 1967	Av. no. of colonies per tree	
				1966	1967
Bathurst	jP	3	10	4.0	0.8
Dalhousie	rP	4	100	1.5	6.1
North Elmsley	rP	5	10	1.0	0.9
Oxford	rP	3	100	1.5	10.9
South Crosby	rP	4	100	0.1	0.1
Wolford	rP	3	100	2.5	0.5

A Jack-pine Sawfly, Neodiprion pratti paradoxicus Ross.

This insect again caused severe defoliation to jack pine plantations in South Crosby, Drummond, Lanark, and Clarence townships. Moderate defoliation occurred on planted jack pine at Rideau Provincial Park in Marlborough Township. Light damage was observed on jack pine in Ramsay, Oxford, and South Sherbrooke townships and on pitch pine in Front of Yonge Township.

Spring and Fall Cankerworms, Paleacrita vernata (Peck) and Alsophila pometaria Harr.

A sharp rise in cankerworm population levels was observed in 1967. The highest populations occurred near Stittsville in Goulbourn Township where deciduous woodlots suffered moderate defoliation. Light defoliation was observed on hardwoods in Pakenham, Fitzroy, Huntley, and Kitley townships. Single larvae were found commonly elsewhere in the district.

Yellow-headed Spruce Sawfly, Pikonema alaskensis (Roh.)

Small pockets of heavy infestation occurred in white spruce plantings in Augusta, Goulbourn, Lanark, and Fitzroy townships. A medium infestation occurred in South Sherbrooke Township. Light defoliation was observed commonly on open-grown spruce trees at numerous locations in the remainder of the district.

White-pine Weevil, Pissodes strobi (Peck)

A general increase in population levels of this weevil occurred in 1967. Heavy infestations occurred on natural white pine regeneration in Fitzroy and Lansdowne townships and in a white pine plantation in Dalhousie Township where 49 per cent of the trees examined were infested (Table 17). Medium infestations were recorded in Torbolton and Dalhousie townships. Small numbers of infested trees were observed at numerous other widely-scattered locations.



TABLE 17

Summary of Damage by the White-pine Weevil in the Kemptville District in 1966 and 1967

Location (township)	Av. d.b.h. of sample trees in inches	No. of trees examined	Per cent of trees weevilled	
			1966	1967
Fitzroy	3	100	--	36
Bathurst	4	100	1	8
Cambridge	3	50	3	5
Dalhousie	3	100	--	49
Oxford	4	100	3	6

Imported Willow Leaf Beetle, Plagioder a versicolora Laich.

Heavy infestations of this leaf beetle prevailed on willow trees along the north shore of the St. Lawrence River between Cornwall and the Quebec boundary. Heavy infestations also occurred on roadside shrubbery and ornamental willows along Highway 17 between Cumberland and Alfred. Light to medium infestations were noted at numerous locations south of Ottawa in Carleton and Grenville counties.

Larch Sawfly, Pristiphora erichsonii (Htg.)

Populations of this sawfly remained at a low level for the fifth consecutive year except in Montague Township where a small pocket of heavy infestation occurred north of Highway 29. Scattered individual colonies were observed commonly elsewhere in the district.

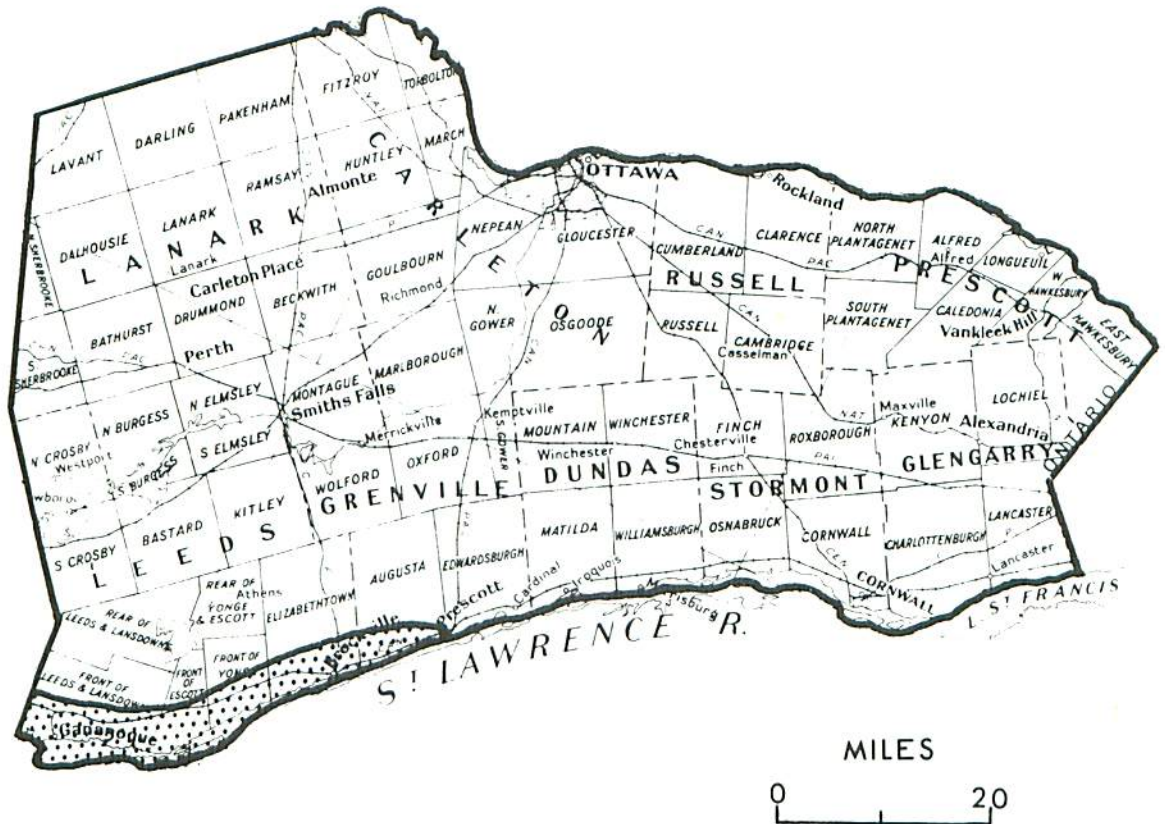
Mountain-ash Sawfly, Pristiphora geniculata (Htg.)

Heavy infestations of this sawfly were noted on Department of Highways shelterbelts in Cumberland and South Gower townships. A light infestation occurred in the Howard G. Ferguson Nursery in Oxford Township. Light-to-moderate damage was observed commonly on ornamental and shade trees.

Elm Bark Beetles, Scolytus multistriatus (Marsh.) and Hylurgopinus rufipes Eich.

The smaller European elm bark beetle S. multistriatus, an important vector of the Dutch elm disease, Ceratocystis ulmi (Buism.) C. Moreau, was collected in the Kemptville District for the first time in 1967. Galleries of this beetle were found in dead and dying elm trees in Elizabethtown, Front of Lansdowne and Augusta townships, indicating its presence in a narrow band approximately five miles wide from the Tweed District boundary along the north shore of the St. Lawrence River to the town of Prescott (see map). Although intensive surveys were carried out no trace of the insect was found elsewhere in the district.

# KEMPTVILLE DISTRICT



## EUROPEAN ELM BARK BEETLE

Area where collections were made  
in 1967

### Legend

Area ..... 



A particularly heavy infestation of another vector, the native elm bark beetle, H. rufipes, occurred along the north shore of the St. Lawrence River in the vicinity of Brockville where large numbers of dead and dying elms provided a large supply of brood material. Scattered light-to-heavy infestations were noted at most locations where dead or dying elms or elm slash was found.

TABLE 18

Summary of Miscellaneous Insects Collected in the Kemptville District in 1967

Insect	Host(s)	Remarks
<i>Acleris variana</i> (Fern.)	wS	Common on beating samples throughout the district
<i>Acordulecera</i> sp.	Bu, sHi, Wa	Several colonies of this sawfly in Lansdowne and South Burgess Townships
<i>Acrobasis betulella</i> Hlst.	wB	Light along Highway 29 near Smiths Falls
<i>Acrobasis stigmella</i> Dyar	bHi	Small numbers in new shoots at two locations
<i>Acronicta interrupta</i> Gn.	wild apple	Light near Ivy Lea
<i>Acronicta lepusculina</i> Gn.	cPo	Causing light defoliation to ornamental trees, Kemptville Nursery
<i>Adelges abietis</i> Linn.	wS	Heavy near Chaffeys Locks, South Crosby Township, medium in Bathurst Township
<i>Altica ulmi</i> Wood	wE	Heavy infestations near Ivy Lea Bridge and in the town of Brockville
<i>Anchylopera burgessiana</i> Zell.	rO	Light along Highway 401 near Ivy Lea Bridge
<i>Arge pectoralis</i> (Leach)	wB, wiB	Light infestation near Kemptville, single colonies at several widely separated locations
<i>Argyresthia laricella</i> Kft.	tL	Light infestations at several locations
<i>Argyresthia</i> sp.	wS	Light near Chaffeys Locks
<i>Argyresthia thuiella</i> Pack.	ewC	Light near Stanleyville
<i>Brachys ovatus</i> (Web.)	rO	Low population in leaf folds, Lansdowne Township

TABLE 18 (continued)

Insect	Host(s)	Remarks
Caliroa sp.	wO,rO,bO	Heavy in Osnabruck Township. Light-to-medium at numerous other locations
Caripeta angustiorata Wlk.	wP	Low population on mat samples in Beckwith Township
Cecidomyiidae	pitch pine	Large numbers in cones near Rockport
Cenopsis acerivorana Mack.	sM	Heavy infestations in Fitzroy and Darling townships, light in Lanark Township
Cenopsis pettitana Rob.	Ba	Light near Stittsville in Goulbourn Township
Coleophora serratella Linn.	wild apple	Medium numbers near Ivy Lea
Coleophora sp.	wild apple	Medium numbers using flower pistil for case near Ivy Lea
Coleophora ulmifoliella MacD.	sE	Heavy on one tree in Leeds Township
Conotrachelus juglandis Lec.	Bu	Medium population in fruit, Wolford Township
Contarinia negundifolia Felt	mM	Heavy on ornamental trees at cabin grounds
Corthylus punctatissimus Zimm.	sM	Light infestation along Rideau Narrows Road in South Burgess Township
Dasineura balsamicola (Lintn.)	bF	Light in Bathurst Township
Dasineura gleditschiae O.S.	L	Light in Drummond Township on ornamentals
Datana integerrima G. & R.	Wa,sHi, bHi	Heavy in Charlottenburg Township. Light at numerous other locations
Datana ministra Dru.	wE	Causing severe defoliation to elm reproduction along Highway 17 in Gloucester Township
Dioryctria reniculella Grt.	wS	Light in Drummond Township
Ecdytolopha insiticiiana Zell.	L	Light infestation along Highway 401 near Ivy Lea Bridge



TABLE 18 (continued)

Insect	Host(s)	Remarks
<i>Epinotia aceriella</i> Clem.	sM	Light infestations in Osnabruck and Lansdowne townships
<i>Epinotia corylana</i> McD.	Al	Light-to-heavy infestations throughout the district
<i>Erannis tiliaria</i> (Harr.)	mM, wE	Light infestation in Huntley Township. Common elsewhere
<i>Eriocampa juglandis</i> (Fitch)	Wa	Light infestation at Ivy Lea Park
<i>Eriosoma lanigerum</i> (Hausm.)	eMo	Medium infestation at the Kemptville Nursery
<i>Eufidonia notataria</i> Wlk.	eH	Medium numbers in South Elmsley Township
<i>Eupithecia mutata</i> Pears.	eH	Heavy infestation in cones near Rideau Ferry
<i>Eupithecia palpata</i> Pack.	pitch pine	Low population on roadside trees near Mallorytown
<i>Evodinus monticola</i> (Rand.)	wS	Medium number in trap logs
<i>Exoteleia pinifoliella</i> (Cham.)	jP	Low populations in plantations in Oxford and Drummond townships
<i>Fenusa dohrnii</i> (Tischb.)	Al	Heavy in East Hawkesbury Township
<i>Fumaria casta</i> Pall.	rP	Light in Nepean Township, first Ontario record
<i>Gonioctena americana</i> (Scheaf.)	tA	Low population throughout the district
<i>Gracillaria</i> sp.	Do	Heavy near Elgin in South Crosby Township
<i>Hemichroa crocea</i> (Four.)	Al	Single colony in Fitzroy Township
<i>Hydriomena divisaria</i> Wlk.	eH	Low population in South Elmsley Township
<i>Ipimorpha pleonectusa</i> Grt.	tA, ltA	Small numbers found commonly
<i>Lambdina fiscellaria</i> <i>fiscellaria</i> Gn.	bF, eH	Small number in South Elmsley and Beckwith townships
<i>Lecanium</i> sp.	wE, bHi, L	Medium-to-heavy in Drummond Township

TABLE 18 (continued)

Insect	Host(s)	Remarks
<i>Lepidosaphes ulmi</i> (Linn.)	L	Heavy in Osnabruck Township. Light in Beckwith Township
<i>Lithicolletis caryaefoliella</i> Clem.	sHi	Light infestation on Hill Island, St. Lawrence River
<i>Lithicolletis lucetiella</i> Clem.	Ba	Light infestation in North Plantagenet Township
<i>Lithicolletis lucidicostella</i> Clem.	sM	Low population near Ingleside
<i>Lithicolletis ostryarella</i> Cham.	I	Light-to-medium at several locations
<i>Lithicolletis robiniella</i> Clem.	L	Low population in Lansdowne Township
<i>Lithicolletis salicifoliella</i> Cham.	tA,ltA	Found commonly in small numbers
<i>Megacyllene robiniae</i> Forst.	L	Causing light mortality among ornamentals in Oxford Township
<i>Monochamus notatus</i> Drury	wS	Medium population in trap logs
<i>Monochamus scutellatus</i> Say	wS	Medium population in trap logs
<i>Monoctenus suffusus</i> (Cress.)	rJ	Low population at several locations
<i>Nematus erythrogaster</i> (Nort.)	Al	Severe defoliation along Highway 17 near Cumberland
<i>Nematus fulvicrus</i> Prov.	W	Single collection near Chute a Blondeau
<i>Nematus limbatus</i> Cress.	W	Single colony in Rear of Leeds and Lansdowne townships
<i>Neodiprion nanulus</i> nanulus Schedl	rP	Light infestation north of Lanark
<i>Neodiprion pinetum</i> (Nort.)	wP	Heavy on two trees in Lavant Township
<i>Neodiprion virginianus</i> complex	jP	Light defoliation in the Limerick Forest
<i>Nephoteryx vestutella</i> (Dyar)	Ba	Light infestations in Kemptville Nursery and near Treadwell in North Plantagenet Township
<i>Nymphalis antiopa</i> L.	cPo	Light defoliation to cutting stock in Kemptville Nursery
<i>Oreana unicolorella</i> Hlst.	Ba,sE	Small numbers at two locations



TABLE 18 (continued)

Insect	Host(s)	Remarks
<i>Pandemis limitata</i> Rob.	rE	Light infestation in North Crosby Township
<i>Paraclemensia acerifoliella</i> Fitch	sM	Heavy infestation near Butternut Bay in Front of Yonge Township
<i>Parectopa robinella</i> Clem.	L	Medium infestation near Ivy Lea Bridge
<i>Pareophora minuta</i> MacG.	bAs	Moderate defoliation along Baudette Creek, Lancaster Township
<i>Perilista albicollis</i> Nort.	bO	Several colonies near Fitzroy Harbour and near Bridge End
<i>Petrova albicapitana</i> (Busck)	ScP, jP	Light infestation near Franktown, medium infestation in Marlborough Township Forest
<i>Petrova comstockiana</i> (Fern.)	pitch pine	Small numbers in Front of Yonge and Escott Townships. First Ontario record
<i>Phenacaspis pinifoliae</i> (Fitch)	bF, ScP	Found commonly on pine throughout the district. Single collection on balsam fir from Dalhousie Township was a first Ontario record on this host
<i>Phigalea titea</i> Cram.	mM, rE	Small numbers in Goulbourn and Huntley Townships
<i>Phylloxera caryaeglobuli</i> Walsh	sHi	Heavy infestation in Lansdowne Township
<i>Pikonema dimockii</i> Cress.	wS	Found commonly on beating samples
<i>Pleroneura borealis</i> Felt.	bF	Light infestations in Fitzroy, Drummond, and Beckwith townships
<i>Pristiphora lena</i> Kinc.	wS	Small numbers found commonly on beating samples
<i>Prociphilus imbricator</i> Fitch	Be	Low population in Ramsay Township
<i>Profenusa canadensis</i> (Marl.)	Haw	Heavy infestations widespread in four counties
<i>Protoaboarmia porcelaria</i> <i>indicataria</i> Wlk.	eH, bF	Found commonly on beating samples
<i>Pulicalvaria abietisella</i> Pack.	eH	Light infestations in Rear of Leeds and Lansdowne, and Walford townships

TABLE 18 (concluded)

Insect	Host(s)	Remarks
<i>Pulicalvaria piceaella</i> (Kft.)	wS	Small numbers near Chaffeys Locks
<i>Pulvinaria</i> sp.	sM	Heavy scale infestation in the town of Carleton Place
<i>Rhabdophaga swainei</i> Felt	wS	Light at three locations
<i>Schizura concinna</i> J. E. Smith	Wa, wE	Single colonies at several locations
<i>Semiothisa bicolorata</i> Fabr.	ScP, pitch pine	Small numbers on beating samples in Front of Yonge and Edwardsburg townships
<i>Semiothisa bisignata</i> Wlk.	wP	Small numbers on beating samples
<i>Semiothisa dispuncta</i> Wlk.	wS, bF	Low populations at three locations
<i>Semiothisa fissinotata</i> Wlk.	eH	Small numbers on beating samples in South Crosby and South Elmsley townships
Tenthredinidae	I	Several colonies of sawflies near Hoople Creek
Tenthredinidae	L	Low population on ornamentals in Drummond Township
<i>Tetralopha expandens</i> Wlk.	bO, wO	Single colonies at two locations
<i>Tetralopha robustella</i> Zell	pitch pine	Several colonies on roadside trees in Lansdowne and Escott townships
<i>Tetropium cinnamopterum</i> Kby.	wS	Low population in trap logs in Drummond Township
<i>Thera juniperata</i> L.	rJ	Small numbers on beating samples at several locations
<i>Tischeria castaneaella</i> Cham.	rO	Medium infestations along Highway 401 in Escott and Lansdowne townships
<i>Toumeyella numismaticum</i> (P. & M.)	jP, ScP	Light in Nepean Township, heavy in Oxford Township
<i>Vespamima pini</i> Kell.	ScP	Medium numbers in Goulbourn Township
<i>Zeiraphera canadensis</i> Mut. & Free.	wS	Medium infestation in Drummond Township