



## FOREWORD

J. E. MacDonald

Outbreaks of the forest tent caterpillar have highlighted reports dealing with forest insect surveys for the past several years. In 1965, the outbreak in Western Ontario reached its peak and poplar stands within an area of about 34,000 square miles were severely defoliated. Egg surveys in the fall revealed that a marked decline in infestation intensity will occur in Sioux Lookout and Kenora districts but high larval populations will persist in Fort Frances and Port Arthur districts in 1966. Trends in infestation intensities will vary from area to area in eastern Ontario, with the most noteworthy increase in the extent of infestations occurring in the Lake Nipissing outbreak.

The development of new infestations of Bruce spanworm and the European pine sawfly were of particular interest in 1965. Infestations of the former occurred in Sault Ste. Marie, Sudbury and Pembroke districts. Severe defoliation of hardwoods that resulted in relatively large areas represented first records of extensive infestations in Ontario. A major extension in the known distribution of the European pine sawfly was recorded when the insect was found in two Scots pine plantations on Manitoulin Island. This extension places the insect much closer to major stands of jack pine in northern Ontario.

For the third consecutive year low temperatures in the spring caused considerable mortality of the current year's shoots of balsam fir and white spruce at many locations in Ontario. Continued cold weather throughout the summer delayed the development of many insects and in some instances larvae failed to reach maturity before freezing temperatures occurred in the fall.

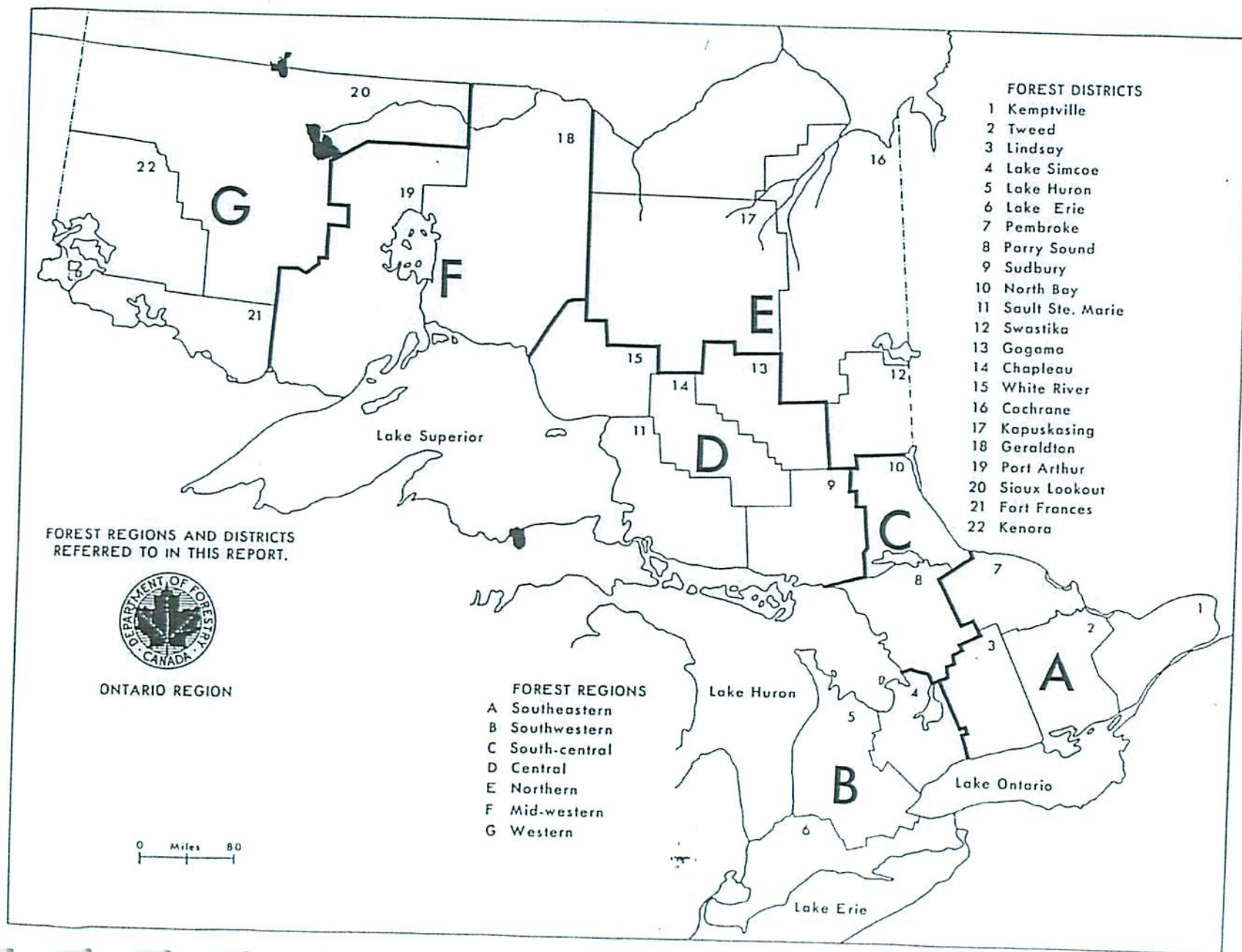
Tree disease surveys continued to reveal serious losses of white elm resulting from Dutch elm disease in southern Ontario. In northern Ontario two centers of infection occurred on Manitoulin Island and infected elm were found at one location near Spanish on the North Shore of Lake Huron. Intensive surveys to determine the distribution and incidence of this disease will be continued in 1966.

During the early years of the Survey in Ontario Field Technicians were largely concerned with determining the distribution and abundance of forest insects and appraising losses in forest stands. As a consequence the detection aspect of survey work was of a high order. Later, added responsibility for disease surveys and the development of more elaborate sampling procedures, reduced the time available for purely detection work. To compensate for this, greater emphasis has been placed on systematic aerial reconnaissance throughout the vast forested areas of central and northern Ontario.

The Survey welcomed the addition of a Forest Research Technician to its staff in 1965. This appointment now provides one field representative for each district in the Southeastern Region where formerly three men were responsible for survey work in four districts.

In the reports that follow, insects and tree diseases that are of interest in adjoining districts are dealt with on a regional basis. Others are dealt with in detail on a district basis.





**FOREST DISTRICTS**

- 1 Kemptville
- 2 Tweed
- 3 Lindsay
- 4 Lake Simcoe
- 5 Lake Huron
- 6 Lake Erie
- 7 Pembroke
- 8 Parry Sound
- 9 Sudbury
- 10 North Bay
- 11 Sault Ste. Marie
- 12 Swastika
- 13 Gogoma
- 14 Chapleau
- 15 White River
- 16 Cochrane
- 17 Kapuskasing
- 18 Geraldton
- 19 Port Arthur
- 20 Sioux Lookout
- 21 Fort Frances
- 22 Kenora

FOREST REGIONS AND DISTRICTS REFERRED TO IN THIS REPORT.



ONTARIO REGION

**FOREST REGIONS**

- A Southeastern
- B Southwestern
- C South-central
- D Central
- E Northern
- F Mid-western
- G Western



TABLE OF CONTENTS  
 REPORTS OF FOREST RESEARCH TECHNICIANS

Ontario	Page
Foreword, J. E. MacDonald	
<b>A. <u>SOUTHEASTERN FOREST REGION</u></b>	<b><u>A1-50</u></b>
Lindsay District, W. J. Miller* .....	A 11
Tweed District, F. Livesey .....	A 22
Kemptonville District, J. Hook .....	A 33
Pembroke District, H. J. Weir .....	A 41
<b>B. <u>SOUTHWESTERN FOREST REGION</u></b>	<b><u>B1-49</u></b>
Lake Simcoe District, A. A. Harnden* .....	B 16
Lake Huron District, R. L. Bowser .....	B 29
Lake Erie District, J. R. Trinnell .....	B 39
<b>C. <u>SOUTH-CENTRAL FOREST REGION</u></b>	<b><u>C1-24</u></b>
North Bay District, L. S. MacLeod* .....	C 5
Parry Sound District, C. A. Barnes .....	C 14
<b>D. <u>CENTRAL FOREST REGION</u></b>	<b><u>D1-56</u></b>
Sault Ste. Marie District, H. G. McPhee* .....	D 13
Sudbury District, J. R. McPhee .....	D 20
Chapleau District, D. Ropke .....	D 29
Gogama District, R. A. Trieselmann .....	D 38
White River District, D. C. Constable .....	D 50
<b>E. <u>NORTHERN FOREST REGION</u></b>	<b><u>E1-42</u></b>
Cochrane District, H. R. Foster* .....	E 8
Kapusking District, G. T. Atkinson .....	E 20
Swastika District, M. J. Applejohn .....	E 32
<b>F. <u>MIDWESTERN FOREST REGION</u></b>	<b><u>F1-27</u></b>
Port Arthur District, K. C. Hall* .....	F 8
Geraldton District, V. Jansons .....	F 19
<b>G. <u>WESTERN FOREST REGION</u></b>	<b><u>G1-40</u></b>
Sioux Lookout District, P. E. Buchan* .....	G 13
Kenora District, G. G. Jackson .....	G 23
Fort Frances District, M. J. Thomson .....	G 33

Photographs

\* Regional Supervisors



1965

Information Report No.	Subject	Author
O-X-5	Forest Insect & Disease Surveys	
	--Lindsay District	W. J. Miller
O-X-6	--Tweed District	F. Livesey
O-X-7	--Kemptville District	J. Hook
O-X-8	--Pembroke District	H. J. Weir
O-X-9	--Lake Simcoe District	A. A. Harnden
O-X-10	--Lake Huron District	R. L. Bowser
O-X-11	--Lake Erie District	J. R. Trinnell
O-X-12	--North Bay District	L. S. MacLeod
O-X-13	--Parry Sound District	C. A. Barnes
O-X-14	--Sault Ste. Marie District	H. G. McPhee
O-X-15	--Sudbury District	J. R. McPhee
O-X-16	--Chapleau District	D. Ropke
O-X-17	--Gogama District	R. A. Trieselmann
O-X-18	--White River District	D. C. Constable
O-X-19	--Cochrane District	H. R. Foster
O-X-20	--Kapuskasing District	G. T. Atkinson
O-X-21	--Swastika District	M. J. Applejohn
O-X-22	--Port Arthur District	K. C. Hall
O-X-23	--Geraldton District	V. Jansons
O-X-24	--Sioux Lookout District	P. E. Buchan
O-X-25	--Kenora District	G. G. Jackson
O-X-26	--Fort Francis District	M. J. Thomson



STATUS OF INSECTS IN THE KENORA DISTRICT

	Page
Black-headed Budworm.....	<u>Acleris variana</u> Fern. G 23
Cherry Ugly-nest Caterpillar.....	<u>Archips cerasivoranus</u> (Fitch.) G 23
Jack-pine Budworm.....	<u>Choristoneura pinus</u> Free. G 23
Aspen Leaf Beetle.....	<u>Chrysomela crotchi</u> Brown G 23
European Spruce Sawfly.....	<u>Diprion hercyniae</u> Htg. G 24
White Pine Shoot Borer.....	<u>Eucosma gloriola</u> Heinr. G 24
Fall Webworm.....	<u>Hyphantria cunea</u> (Drury) G 24
Aspen Blotch Miner.....	<u>Lithocolletis salicifoliella</u> Chamb. G 25
Western Tent Caterpillar.....	<u>Malacosoma pluviale</u> Dyar G 25
Balsam-fir Sawfly.....	<u>Neodiprion abietis</u> complex G 26
Red Pine Sawfly.....	<u>Neodiprion nanulus nanulus</u> Schedl. G 26
Swaine's Jack-pine Sawfly.....	<u>Neodiprion swainei</u> (Midd.) G 26
Red-headed Jack-pine Sawfly.....	<u>Neodiprion virginianus</u> complex G 26
Poplar Serpentine Leaf Miner.....	<u>Phyllocnistis populiella</u> Chamb. G 27
White Pine Weevil.....	<u>Pissodes strobi</u> Peck. G 27
Larch Sawfly.....	<u>Pristiphora erichsonii</u> Htg. G 28
Pine Tortoise Scale.....	<u>Toumeyella numismaticum</u> P. McD. G 28
Bark Beetles.....	G 28
Summary of Miscellaneous Insects.....	G 29

G. G. Jackson



Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several lines and appears to be a list or a set of instructions.





Black-headed Budworm, Acleris variana Fern.

The declining trend in population levels of this insect noted from 1962 to 1964 continued in 1965. The heavy infestation that occurred at Kaoskauta Lake in 1964 declined to light intensity in 1965. Endemic numbers were found in beating samples at scattered points throughout all divisions in the district.

Cherry Ugly-nest Caterpillar, Archips cerasivoranus (Fitch.)

In 1965, population levels of this caterpillar declined to its lowest ebb since 1961 (Table 11). Only one or two colonies were observed at four of the seven permanent sample stations with negative counts occurring at the three remaining sample points.

TABLE 11

Summary of Cherry Ugly-nest Caterpillar Colony Counts  
in the Kenora District from 1961 to 1965

Location (township)	No. of colonies per mile of roadside				
	1961	1962	1963	1964	1965
Haycock	7	5	0	1	0
Jaffray	4	2	0	7	2
Mutrie	2	3	4	1	0
Pellatt	6	4	0	3	2
Forgie	5	5	4	1	0
Boys	2	0	7	2	1
Langton	7	4	6	1	1

Jack-pine Budworm, Choristoneura pinus Free.

Population levels of this insect showed a marked increase compared with 1964. Medium infestations persisted at Atikwa and Upper Lawrence lakes approximating 120 square miles in area. A new area of medium infestation comprising approximately 20 square miles occurred between Eagle River and Waldhof in Mutrie Township. In this area, open-grown and fringe trees were most severely defoliated. Generally, the numbers of larvae collected in beating samples were higher than in previous years (see photograph).

Aspen Leaf Beetle, Chrysomela crotchii Brown

A noteworthy decrease in population levels of this insect occurred in 1965. Major areas of infestation recorded at Nestor Falls, Sioux Narrows, Kenora, Minaki, MacIntosh, and Dryden in 1964, subsided to light intensity in 1965. All diameter classes of trembling aspen were moderately defoliated, particularly along shorelines and in open-grown stands. At four locations, numerous small clumps of willow and alder were lightly infested. High populations of this insect have caused much concern and discomfort among tourists and camp operators throughout the district as the adult beetles congregate in mass numbers on shorelines where copulation occurs.



European Spruce Sawfly, Diprion hercyniae Htg.

No significant change in population levels of this introduced sawfly occurred in 1965 (Table 12). However, the distribution of this species has changed considerably since it was first collected near Minaki and Sioux Narrows in the western part of the district in 1961. In 1964 and 1965 the distribution boundaries were extended approximately 100 miles to the east and southeast where light infestations now occur at Sunshine Lake and in Docker Township.

TABLE 12

Summary of European Spruce Sawfly Larval Counts Made On White Spruce in the Kenora District in 1964 and 1965

Location	Av. d.b.h. in inches	Av. no. of larvae per 15-mat sample	
		1964	1965
Sunshine Lake (Div. 18)	3	2.8	2.6
Docker Twp. (Div. 18)	3	1.4	1.6
Bruin Lake (Div. 21)	4	1.9	2.0

White Pine Shoot Borer, Eucosma gloriola Heinr.

There was no significant change in the status of this insect in 1965. Population levels were highest in the central and eastern part of the district. Medium infestations persisted at four permanent sample stations (Table 13). This borer mines the terminal and lateral shoots of white, Scots, red, and jack pine in Ontario, but is most commonly found in jack pine in the Kenora District.

TABLE 13

Summary of Terminal and Lateral Shoot Damage by the White Pine Shoot Borer on Jack Pine Trees in the Kenora District in 1964 and 1965

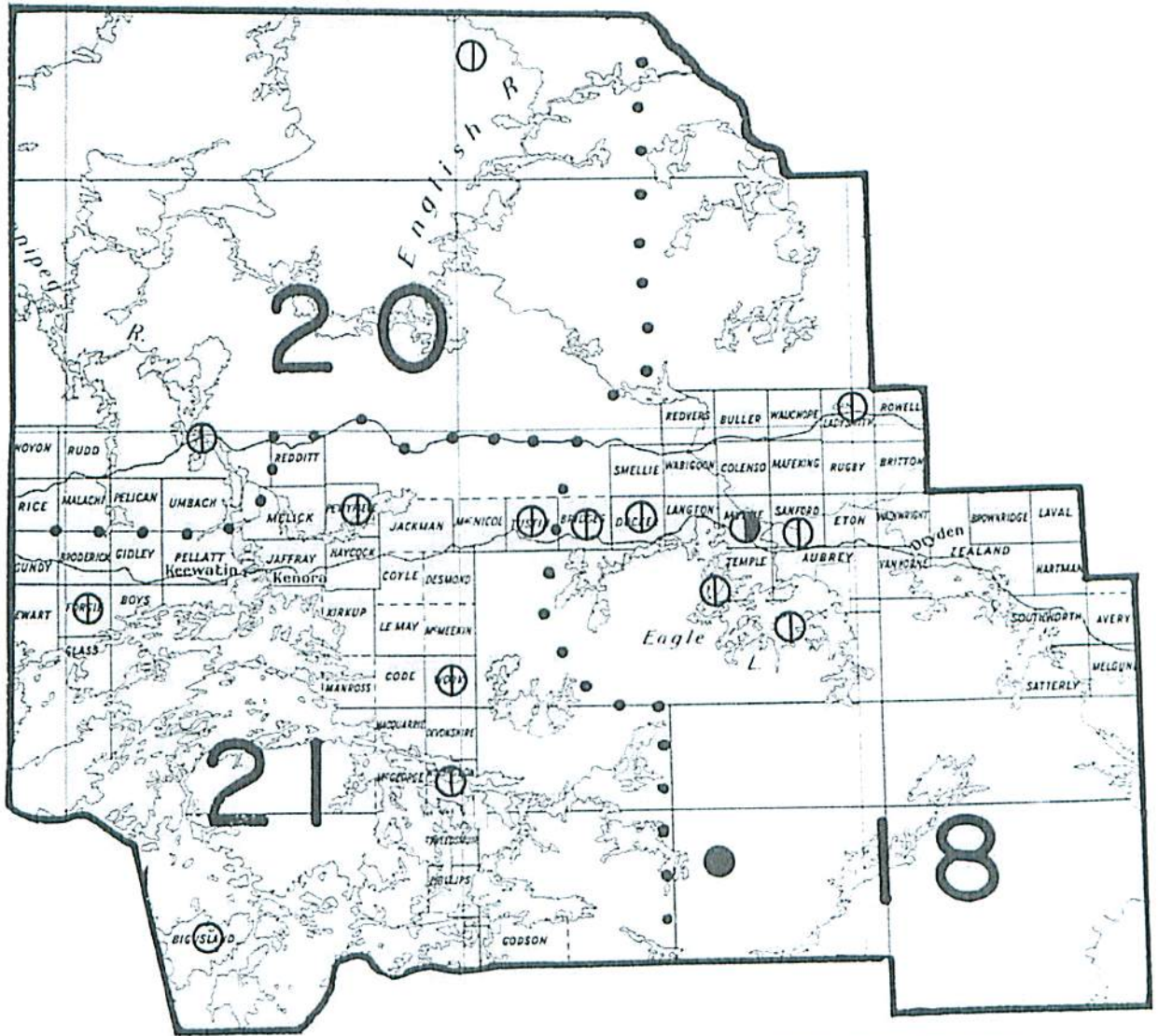
Location	Av. d.b.h. in inches	No. of trees examined	No. of trees infested		No. of shoots attacked			
			1964	1965	Terminal		Laterals	
					1964	1965	1964	1965
Willingdon Twp.	3	50	7	11	13	12	9	14
Smellie Twp.	2	100	27	24	18	16	11	9
Langton Twp.	3	50	21	19	9	13	14	15
Eagle Lake (Canoe Narrows)	3	100	42	46	41	37	19	16

Fall Webworm, Hyphantria cunea (Drury)

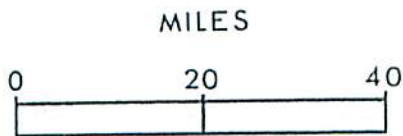
Populations of this caterpillar have continued to decline since 1958. An extremely sharp decrease in numbers of colonies occurred at Bay Island in Lake of the Woods where only three colonies were counted in a square chain plot in 1965



# DISTRICT OF KENORA



JACK PINE BUDWORM



Areas within which defoliation occurred in 1965

Legend

- Light infestation..... ●
- Medium infestation..... ◐
- Heavy infestation..... ⊕



compared with 139 colonies in 1964 (Table 14). Counts were negative at four of the eight sample stations in 1965.

TABLE 14

Summary of Fall Webworm Colony Counts in the Kenora District from 1962 to 1965

Location	No. of colonies per mile of roadside			
	1962	1963	1964	1965
MacNicol Twp.	4	14	3	1
Colenso Twp.	2	6	1	0
Langton Twp.	1	8	2	0
Tweedsmuir Twp.	5	32	7	3
Mutrie Twp.	1	5	1	0
Canyon Lake	3	7	2	0
Zizania Lake	-	-	2	1
Bay Island (Sq. Chain Plot)	-	-	139	3

Aspen Blotch Miner, Lithocolletis salicifoliella Chamb.

Population levels of this leaf miner were relatively low for the second consecutive year. Light infestations occurred on trembling aspen and large-toothed aspen regeneration in Desmond, Willingdon, Langton, and Bridges townships. Competition resulting from heavy defoliation by the forest tent caterpillar throughout the greater part of the district was probably responsible for the low numbers of this leaf miner.

Western Tent Caterpillar, Malacosoma pluviale Dyar.

Population levels of this insect were comparable to 1964, except in one sample point in Mutrie Township where a three-fold increase in the number of colonies occurred (Table 15). Field observations indicated that larval parasitism occurred frequently and a polyhedral virus disease was extremely noticeable near Camp Robinson in Division 18 and at mileage 39 on the Jones Road in Division 20.

TABLE 15

Summary of Western Tent Caterpillar Colony Counts at Thirteen Locations in the Kenora District from 1963 to 1965

Location	Host(s)	No. of colonies per mile of roadside		
		1963	1964	1965
Camp Robinson Road	pCh	34	63	61
MacNicol Twp.	pCh	43	44	47
Ewart Twp.	pCh	19	27	29
Mutrie Twp.	pCh, wB	14	29	87
Docker Twp.	pCh, W	9	16	14
Desmond Twp.	pCh	11	19	32
Work Twp.	pCh, W	13	18	18
Willingdon Twp.	pCh, W	2	20	22
Lemay Twp.	pCh, W	16	23	19
McMeecken Twp.	pCh	18	17	15
Jaffray Twp. (Jones Rd.)	W, pCh	17	22	19
Forgie Twp.	W, wB	21	22	25
Melick Twp.	W, pCh	10	32	37



Balsam-fir Sawfly, Neodiprion abietis complex

A decline in population levels occurred for the second consecutive year. The heavy infestation recorded at Shoal Lake from 1961 to 1963 has completely disappeared. Single colonies were observed at two widely-separated points in the district and small numbers of larvae were found in beating mat samples.

Red Pine Sawfly, Neodiprion nanulus nanulus Schedl.

A slight increase in the numbers of colonies of this insect occurred at permanent sample stations compared with 1964 (Table 16). The insect was observed most commonly in the southwestern and central parts of the district.

TABLE 16

Summary of Red Pine Sawfly Larval Colony Counts on Ten Trees  
at Five Locations in the Kenora District  
in 1964 and 1965

Location	Av. d.b.h. in inches	Av. no. of colonies per tree	
		1964	1965
Upper Lawrence Lake	3	0.6	1.8
Nestor Falls	4	1.1	2.7
Colenso Twp.	2	0.1	1.1
Docker Twp.	3	1.2	1.4
Tustin Twp.	3	0.8	1.2

Swaine's Jack-pine Sawfly, Neodiprion swainei (Midd.)

No significant change in the status of this jack-pine sawfly occurred in 1965. Light infestations have persisted at Sabaskong Bay and Rabbit Point in Lake of the Woods since 1961. In the same general area scattered colonies were observed on the Aulneau Peninsula and north of Nestor Falls on Highway 72. Survey records reveal that the distribution of this insect in the Kenora District is restricted to the Lake of the Woods area.

Red-headed Jack-pine Sawfly, Neodiprion virginianus complex

No appreciable change in the status of this insect occurred in the district in 1965 (Table 17). Colonies were observed most commonly in the central parts of the district but were rarely found in the northern portion. Small groups of open-grown jack pine regeneration were moderately defoliated in MacNicol, Work, and Desmond townships and on shoreline trees at Ord Lake. Several hundred cocoons were exposed at three widely-separated points in the district to determine the distribution of the parasite, Pleolophus basizonus (Grav.) which was released at Hawk Lake in 1940.



TABLE 17

Summary of Red-headed Jack-pine Sawfly Larval Colony Counts on Ten Jack-pine Trees at Each Location in the Kenora District in 1964 and 1965

Location	Av. no. of colonies per tree	
	1964	1965
Zealand Twp.	--	1.7
Melgund Twp.	--	0.8
Eye Lake	--	2.6
Ord Lake	--	0.6
Mando Camp 208	--	1.8
Miles Bay (Lake of the Woods)	0.3	0.5
Redvers Twp.	0.1	1.1
MacNicol Twp.	1.6	7.1
Kirkup Twp.	0.9	1.4
Van Horne Twp.	3.3	2.8
Work Twp.	0.8	1.6
Docker Twp.	0.8	1.9
Wabigoon Twp.	0.4	0.0
Rugby Twp.	2.6	2.1
Tustin Twp.	0.8	2.2
Mutrie Twp.	1.4	1.1

Poplar Serpentine Leaf Miner, Phyllocnistis populiella Chamb.

First records of light infestation of this insect were established at two locations in the district in 1965. This interesting insect mines the foliage of trembling aspen and balsam poplar and is usually observed in extremely low numbers on regeneration. However, in 1965, two pockets of light infestation involving approximately 20 per cent of the leaves in a small clump of balsam poplar occurred at MacIntosh in Division 18 and near Dymont in Melgund Township. The insect occurred more commonly throughout the district in 1965 than in previous years.

White Pine Weevil, Pissodes strobi Peck.

Light infestations of this weevil persisted for the fourth consecutive year. Damage was most prevalent in white and jack pine and white spruce plantations, but small open-grown trees were also attacked at widely-separated points throughout the district (Table 18).

TABLE 18

Summary of Leader Damage by the White Pine Weevil  
in the Kenora District from 1962 to 1965

Location	Host	No. of trees examined	Per cent of trees weevilled			
			1962	1963	1964	1965
Van Horne Twp.	wP	100	11	10	18	14
Redditt Twp. (1)	wP	50	3	4	7	9
Redditt Twp. (2)	jP	50	2	2	7	6
Willingdon Twp.	jP	100	3	5	9	11
Colenso Twp.	jP	100	-	14	17	15
Wabigoon Bridge	jP	100	-	-	14	16
Redvers Twp. (1)	wP	50	-	-	3	4
Redvers Twp. (2)	jP	50	-	-	0	6

Larch Sawfly, Pristiphora erichsonii Htg.

A marked increase in the extent and intensity of infestations of this insect occurred in 1965. Small pockets of heavy infestation were recorded in the townships of Nutrie, Aubrey, Colenso, Bridges, Docker, Jaffray, Ewart, and Haycock, along the Clearwater River and at Ord Lake. One hundred per cent defoliation occurred in a small group of tamarack trees near Sioux Narrows in Division 21. Medium infestations occurred at Bruin Lake in MacNicol Township, along the Shoal Lake Road south of Highway 17 and in Southworth, Melgund, Langton, and Redvers townships. Small groups of tamarack trees were lightly defoliated elsewhere in the district.

Pine Tortoise Scale, Toumeyella numismaticum P. McD.

Tortoise scale numbers increased over previous years. A pocket of heavy infestation occurred in a Department of Lands and Forests plantation at Bell Lake in Temple Township. Jack pine trees in the 2-to-4 inch diameter class were most severely attacked. Medium infestations were observed at Jake Lake in Wabigoon Township and in Van Horne, Smellie, Docker, and Bridges townships. Light infestations were noted at numerous other locations in the central and eastern parts of the district (see photograph).

Bark Beetles .

A survey has been carried out since 1963 to determine the species of bark beetles attacking conifers in the district (Table 19). Samples were submitted from logs, slash, pulpwood, and living trees. The heaviest concentration of beetles occurred in the Lake of the Woods area where jack pine stands have been severely damaged by drought.



TABLE 19

Summary of Bark Beetles Collected in the Kenora District  
from 1963 to 1965

Name of Bark Beetle	Host(s)	No. of locations	Year
<i>Crypturgus borealis</i> Sw.	bS	2	1964
<i>Gnathotrichus materiarius</i> Fitch.	scP	1	1963
<i>Ips grandicollis</i> Eich.	bS	1	1965
<i>Ips perroti</i> Sw.	JP	1	1965
<i>Ips perturbatus</i> Eich.	bS	2	1963
<i>Ips pini</i> Say	JP, scP	12	1963-1965
<i>Orthotomicus caelatus</i> Eich.	JP	1	1965
<i>Orthotomicus latidens</i> Lec.	bS	1	1965
<i>Pityogenes hopkinsi</i> Sw.	wP	1	1965
<i>Pityogenes plagiatus</i> (Lec.)	scP, JP, rP	3	1963-1965
<i>Pityokteines sparsus</i> Lec.	bF	4	1963-1965
<i>Polygraphus rufipennis</i> Kby.	bS	1	1965
<i>Scolytus piceae</i> Sw.	bS	3	1963

TABLE 20

Summary of Miscellaneous Insects Collected  
in the Kenora District

Insect	Host(s)	Remarks
<i>Acrobasis rubrifasciella</i> Pack.	AL	Common on roadside trees at Gordon Lake and Camp 208 Road.
<i>Acronicta dactylina</i> Grt.	AL	Low numbers on Bay Island in Lake of the Woods.
<i>Anomogyna elimata</i> Gn.	JP, wS	Low numbers on each host.
<i>Anoplodera mutabilis</i> Newm.	tA	Adult borers observed in trunk of single tree.
<i>Anoplonyx canadensis</i> Hgtn.	tL	Light infestation of this sawfly in Sanford Twp.
<i>Aphrophora parallela</i> Say	JP	Small pocket of medium infestation on regeneration trees in Mutrie Township.
<i>Arge clavicornis</i> (F.)	W	Observed in Southworth Twp.
<i>Argyresthia pygmaeella</i> Hbn.	W	Leaf tiers in small numbers.
<i>Biston cognataria</i> Gn.	bPo, W, AL, pCh	Single larva observed at each location.
<i>Bucculatrix canadensisella</i> Cham.	wB	Light infestation on Splitrock Island in Lake of the Woods.
<i>Calligrapha ignota</i> Brown	wB	Adults observed at each location.
<i>Carynota stupida</i> Wlk.	wB	Leaf hoppers common on trees examined.
<i>Cecidomyia reeksi</i> Vock.	JP	Light infestation in Docker Township.



TABLE 20 (continued)

Insect	Host(s)	Remarks
<i>Choristoneura fumiferana</i> (Clem.)	wS, bF	Small numbers obtained in beating samples.
<i>Chrysomela mainensis mainensis</i> Bechyne	Al	Light infestation of this leaf beetle at Kaiashkomin Lake.
<i>Colocasia propinquinella</i> Grt.	W	Observed in low numbers on Goose-neck Island in Lake of the Woods.
<i>Croesus latitarsus</i> Nort.	wB	Small clump of trees lightly defoliated at each point.
<i>Datana ministra</i> Dru.	wB, W	Low numbers on roadside shrubs.
<i>Dioryctria abietivorella</i> Grt.	bS	One larva from each point.
<i>Elaphria versicolor</i> Grt.	wS	Low numbers at Peganeis Lake.
<i>Epicnaptera americanum</i> Harr.	bPo, W	First record since 1961.
<i>Eriophyes populi</i> Nal.	tA	Caused deformed growth of aspen regeneration.
<i>Eupithecia filmata</i> Pears.	bF	Loopers common at each location.
<i>Eupithecia transcanadata</i> Mck.	wS	Lightly infested trees near Hawk Lake.
<i>Feralia jocosus</i> Gn.	bS, wS, bF	Observed in all divisions.
<i>Galerucella decora</i> Say	W.	Low population levels on roadside trees.
<i>Gonioctena americana</i> Schaeff.	tA	Medium infestation in a small clump of trees at Stewart Lake.
<i>Gracillaria invariabilis</i> Braun.	pCh	Leaf rollers common near Ord Lake.
<i>Gracillaria syringella</i> F.	bAs	Numerous on shoreline black ash on the Wabigoon River.
<i>Griselda radicana</i> Wlshn.	wS	Collected in small numbers near Flavus Lake.
<i>Halisidota maculata</i> Harr.	Al, W	Skeletonized leaves observed at each point.
<i>Hemichroa crocea</i> (Four.)	Al	Moderate defoliation by this sawfly common on shoreline and roadside trees.
<i>Hydria undulata</i> Linn.	ltA	Lightly infested trees.
<i>Ichthyura inclusa</i> Hbn.	tA	Low numbers in Sanford Twp.
<i>Lambdina fiscellaria fiscellaria</i> Gn.	bF	Low numbers only.
<i>Lapara bombycoides</i> Wlk.	rP	Six trees attacked in Phillips Township.
<i>Monoctonus scutellatus</i> (Say.)	bS, rP, jP, wP	Common throughout district on decadent host trees.
<i>Mulsantina hudsonica</i> Csy.	bF	Predators common near Bruin Lake Portage.
<i>Nadata gibbosa</i> A. & S.	wB	Endemic numbers at Triangle Lake in Division 18.
<i>Neacanthocinus pusillus</i> (Kby.)	rP	Woodborers in small numbers Mutrie Township.
<i>Nematocampa filamentaria</i> Gn.	bF	Submitted from large collection of witches' brooms in Aubrey Township.
<i>Nematus erythrogaster</i> Nort.	Al	Sawfly larvae in low numbers.



TABLE 20 (continued)

Insect	Host(s)	Remarks
<i>Nematus limbatus</i> Cress.	W	Numerous small clumps of light infestation on roadside willow shrubs.
<i>Nemoria mimosaria</i> Gn.	bO, wB	Individual larva at each location.
<i>Neodiprion maurus</i> Roh.	jP	Clumps of light infestation at each point.
<i>Neodiprion nanulus nanulus</i> Schedl.	jP	Light infestation at Upper Lawrence Lake.
<i>Neodiprion pratti banksianae</i> Roh.	jP	Light defoliation at each location.
<i>Nepytia canosaria</i> Wlk.	bF	Small numbers only.
<i>Neurotoma inconspicua</i> (Nort.)	pCh	Single colony in Godson Township.
<i>Nycteola cinearana</i> N. & D.	bPo	Medium infestation on roadside regeneration.
<i>Nycteola frigidana</i> Wlk.	W	Moderate numbers of this leaf tier.
<i>Nyctobia limitaria</i> Wlk.	bF	Loopers common on trees examined.
<i>Orthosia hibisci</i> Gn.	wB	Trace populations at North Narrow Lake in Desmond Twp.
<i>Orthosia revicta</i> Morr.	bF	Lightly infested trees at each point.
<i>Paralobesia rhoifrustrana</i> Kft.	Sumac	Light infestation of this rarely found insect on Gooseneck Island in Lake of the Woods.
<i>Petrova gemistrigulana</i> Kft.	rP	First record of this insect in the Kenora District.
<i>Physokermes piceae</i> Schr.	wS	Trees moderately infested by this scale insect.
<i>Pikonema alaskensis</i> (Roh.)	wS, bS	Open-grown host trees heavily attacked at each point.
<i>Pikonema dimmockii</i> (Cress.)	wS, bS	Moderate defoliation on spruces at numerous points.
<i>Pineus strobi</i> (Htg.)	wP	Common on ornamental trees in the Dryden area.
<i>Pogonocherus penicillatus</i> Lec.	bS	Bark beetle adults in low numbers at North Narrow Lake.
<i>Prionoxystus robinae</i> Peck.	tA	Wood borer adult numerous in decadent host tree.
<i>Pristiphora lena</i> Kincaid	bS	Low numbers at Silver Lake Division 20.
<i>Rhabdophaga swaini</i> Felt.	wS, bS	Bud miners very scarce throughout the district.
<i>Rhagium inquisitor</i> (L.)	rP	Cerambycid larvae common in Lands & Forests plantation in McGeorge Twp.
<i>Rhyaciona frustrana</i> Comst.	jP	Submitted from one location.
<i>Semiothisa dispuncta</i> Wlk.	wS, bS, bF,	Light infestation at eight widely-separated points.
<i>Sparganothis sulfureana</i> Clem.	jP	Low numbers in Mutrie and Docker townships.
<i>Symmerista leucitys</i> Francl.	bO	Low numbers in Lake of the Woods area.

TABLE 20 (continued)

Insect	Host(s)	Remarks
Tetralopha aplastella Clem.	ltA, tA	Light infestation at two locations.
Tetralopha expandens Wlk.	bO	Low numbers of larvae at two points.
Tetralopha robustella Zell.	JP	Larvae in nests surrounding cones - common in Redditt Township.
Tetropium cinnamopterum Kby.	rP	Woodborers common on decadent trees in Mutrie Township.
Xylomyges dolosa Grt.	bPo, tA	Leaf miners common throughout the district.
Zellaria haimbachi Busck.	JP	Common on jack pine regeneration near Waldhof.