

Status of Insects in the Lake Erie
District

Trinnell, J.R.

Information Report O-X-11
(Forest Research Laboratory, Ontario Region)

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.

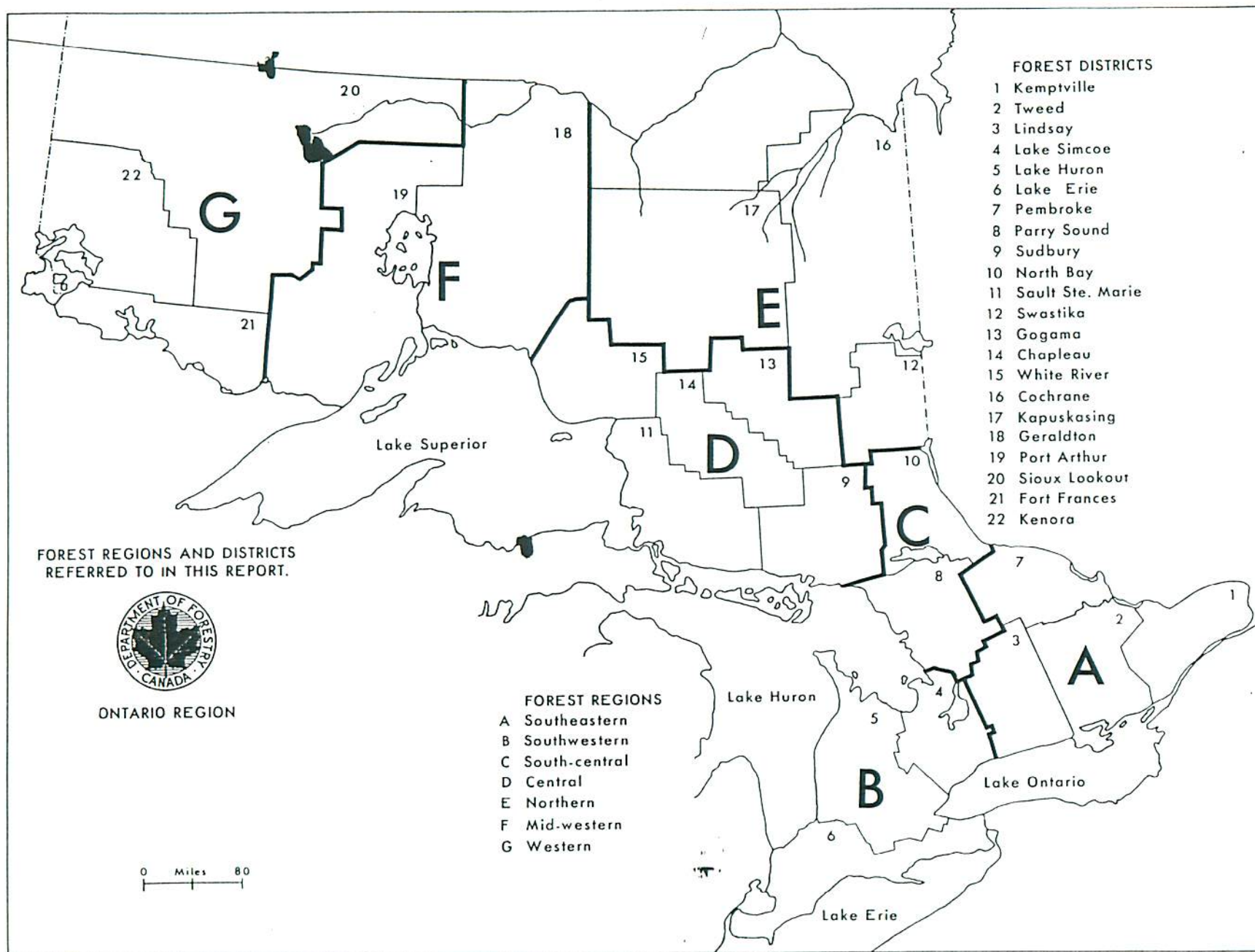


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J. R. Trinnell

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STATUS OF INSECTS

Fall Cankerworm, Alsophila pometaria Harr.

Cankerworm infestations virtually subsided in the district in 1965. Heavy infestations in the Canfield-Canboro area in 1964 declined to very light intensity. All deciduous trees in Lincoln and Welland counties were in better condition this year than for the past several years.

Orange-striped Oakworm, Anisota senatoria A. and S.

Infestations of this insect increased in intensity at Pinery Provincial Park in Bosanquet Township. Defoliation was heavy on a small red oak at the Park entrance, moderate to heavy on six small trees along a nature trail, and moderate on individual red oak trees along roadsides in the Park. Along Highway 21 in this area occasional red oaks under 12-feet in height were severely defoliated. At several points as many as four trees on one side of one mile of roadside were completely stripped. Moderate defoliation recurred on the lower branches of two mature bur oaks near Glencoe, and on the lower branches of a mature, open-grown white oak near Smithville.

Ugly-nest Caterpillar, Archips cerasivoranus Fitch

An upward trend in numbers of this pest occurred in the district in 1965. Heavy infestations occurred on choke cherry along a 100-foot section of highway near Port Maitland and at several other points in Haldimand and Welland counties.

Moderate numbers of colonies were observed in Point Pelee National Park, Mersea Township and near the John E. Pearce Provincial Park in Dunwich Township.

Larch Twig Borer, Argyresthia laricella Kft.

Infestations declined in Caradoc Township and subsided in South Walsingham Township in 1965. Parasitism had been light to moderate at both points in 1964 (Table 9).

TABLE 9

Summary of Larch Twig Borer Counts in Lake Erie District
from 1963 to 1965

Location (township)	Host	Percentage of one-year-old shoots attacked		
		1963	1964	1965
Caradoc	tL	0.6	1.4	0.6
South Walsingham	eL	3.6	2.8	nil

Larch Casebearer, Coleophora laricella (Hbn.)

Population levels of this insect increased in Caradoc and North Dorchester townships and the lower crowns of host trees were moderately defoliated at several locations. In Yarmouth Township infestations were heavy on the bottom branches of European larch trees. Numbers were low at other points (Table 10).

TABLE 10

Summary of Larch Casebearer Counts in Lake Erie District
from 1963 to 1965

Location (township)	Host	Av. d.b.h. in inches	Av. no. larvae per branch tip		
			1963	1964	1965
Bosanquet	tL	10	26.0	5.0	5.9
Caradoc	tL	6	-	0.9	7.5
Charlotteville	eL	7	1.0	1.0	Nil
North					
Dorchester	tL	7	4.0	5.5	8.2
South					
Walsingham	eL	6	0.5	0.4	0.2
Yarmouth	eL	9	3.0	0.7	1.5

Walnut Caterpillar, Datana integerrima G. & R.

Light to severe defoliation occurred on solitary and small groups of trees at numerous points in the district. Walnut was the favourite host, although shagbark hickory was also attacked.

Heavy infestations that occurred in Essex County in 1964 declined generally to medium intensity in 1965. However, defoliation was very high at one sample point in this county (Table 11). High populations recurred in Kent County and in the Aylmer area eastward to the district boundary at Tillsonburg. A marked decline occurred in Point Pelee National Park where only a few small trees were moderately defoliated.

Defoliation was light to moderate on eight 50-year-old walnut trees near Merlin in Romney Township. The trees, 15- to 20-feet in height, have been stunted by repeated walnut caterpillar defoliation and branch mortality was high at this location as well as in Adelaide and Dunwich townships.

Walnut caterpillars feed in dense colonies and moult at the base of limbs or on the bole of host trees. Normally large masses of cast skins and webs adhere to the tree for a year or more. Unusual masses of moulting larvae were observed at Nanticoke and Pelham Centre in 1965. These masses of larvae, about three inches in diameter and four inches in length, were suspended from branches on silken webs.

TABLE 11

Summary of Walnut Caterpillar Defoliation Estimates
in Lake Erie District from 1963 to 1965

Note: Counts were based on estimates of defoliation of ten black walnut trees at each location.

Location (Township)	Av. d.b.h. in inches	Av. height in feet	Approx. per cent defoliation 1963	1964	1965
Dunwich	6	22	10	10	15
Kniskillen	15	45	1	5	15
McGillivray	8	12	-	55	80
Mosa	11	20	10	10	55
South Cayuga	3	15	10	0	3
Tilbury North	12	28	15	15	90
Wainfleet	9	20	20	1	20
Windham	9	22	0	3	10

Yellow-necked Caterpillar, *Datana ministra* (Drury)

Population levels of this insect increased in the district as a whole in 1965. However, medium infestations in Bosanquet and Madstone townships declined to light intensity in 1965. Medium infestations occurred on several white elm trees in Gosfield South Township, on one 22-foot white elm in Howard Township and on a white elm tree along the MacDonald-Carter Freeway near the city of London. Defoliation was light to moderate on scattered hawthorn shrubs along Highway 21 in Dawn Township. Parasitism was high in a large colony observed near Hagersville.

Snout Moth Larva, *Doryctria abietivorella* Grote

This pest of pines occurred in high numbers in a white pine plantation near St. Thomas. Low numbers recurred in Scots and white pine plantings in Pinafore Park, St. Thomas and in a red pine hedgerow near Simcoe.

The increase in populations of this insect near St. Thomas appeared to be associated with infections by white pine blister rust and the use of fungicides to control this disease. Sprays used against blister rust killed the bark around the cankered parts of the trees and provided a suitable environment for oviposition by snout moths.

In the Wright Tract, McGillivray Township one 7-foot white pine which was off-colour yellow in the autumn of 1964 was cut down and examined in early August of 1965. Dissection revealed that the tree was heavily infested by snout moth larvae. Sixty-six larvae were found in the stem near ground level and 45 in the adjacent branches.

Zimmerman Pine Moth, *Doryctria zimmermani* Grt.

The Zimmerman pine moth remains a serious pest in Scots pine plantations in the Newbury-Bothwell area. The heavy infestations of 1964 in Euphemis Township decreased to medium intensity in 1965. However, some of the plantings in this area have been

so severely damaged over a period of years that their merchantability as Christmas trees has been seriously reduced or nullified. The decline in 1965 populations may have been due, in part, to heavy precipitation during the month of August, 1964 when the adults were in flight. Inclement weather is known to have an adverse affect on oviposition. Field surveys at Newbury on June 3 revealed low numbers of early-stage D. zimmermani larvae associated with large numbers of small, yellow larvae identified by the laboratory as "Olethreutidae, probably Laspeyresia species." Further investigations will be made here in 1966 to determine the identity of the olethreutids.

One 15-foot Scots pine in Pinafore Park, St. Thomas, was re-infested in 1965. Four larvae were dug from the bark and wood, one larva being 9-1/2-feet from ground level. The stem of one Scots pine tree at DeCou House, Thorold Township was attacked at ground level where it had been bruised the previous summer by a lawn mower.

Light infestations were recorded in Grantham, McGillivray, Pelham and Willoughby townships.

Nursery Pine Sawfly, Diprion frutetorum Lec.

Medium infestations in Enniskillen, Stamford and Wainfleet townships declined to light intensity in 1965. Numbers were low at all sample points in the district (Table 12).

TABLE 12

Summary of Nursery Pine Sawfly Larval Counts
in Lake Erie District in 1964 and 1965

Location (township)	Host	Av. d.b.h. in inches	Total no. of insects per 15-tray sample	
			1964	1965
Enniskillen	scP	4	72	26
McGillivray	scP	2	1	1
Oneida	scP	2	1	3
Stamford	jP	3	1	5
Stamford	scP	4	110	58
Willoughby	scP	2	12	5

European Spruce Sawfly, Diprion hercyniae (Htg.)

Light infestations at Compartment X-8 of the St. Williams Forest Nursery, South Walsingham Township increased to medium intensity in 1965. Numbers were low at all other sampling points in the district (Table 13).

TABLE 13

Summary of European Spruce Sawfly Larval Counts
in Lake Erie District in 1964 and 1965

Location (township)	Host	Av. d.b.h. in inches	Total no. of insects per 15-tray sample	
			1964	1965
Adelaide	wS	4	7	3
Gainsborough	nS	12	1	4
North Cayuga	wS	4	18	5
South Walsingham	wS	11	12	103
Woodhouse	nS	8	6	19

Introduced Pine Sawfly, Diprion similis (Htg.)

Infestations of this insect increased from light in 1964 to medium intensity in 1965 on jack pine in Stamford Township. Defoliation of 15 to 30 needles at the base of the current years' growth occurred commonly and feeding in the form of small pits was observed frequently on the current year's growth. Numbers remained low on Scots pine in this area (Table 14).

TABLE 14

Summary of Introduced Pine Sawfly Larval Counts in
Lake Erie District in 1964 and 1965

Location (township)	Host	Av. d.b.h. in inches	Total no. of insects per 15-tray sample	
			1964	1965
Stamford	jP	3	104	250+
Stamford	scP	4	8	126

Elm Leaf Beetle, Galerucella luteola (Schrank.)

Medium to heavy infestations of this introduced insect recurred on numerous white elm shade trees in the City of St. Catharines. Medium infestations persisted on 40 English elm trees at Port Stanley, and on several white elm ornamentals at the St. Thomas court house.

Spiny Witch-hazel Gall Aphid, Hamamelistes spinosus Shimer

A medium-to-heavy infestation of this insect occurred on several witch-hazel shrubs in the southern part of the village of Grand Bend in Bosanquet Township. Population levels were medium at Rock Glen Conservation Area near Arkona, and light in Bayham, Bosanquet, Charlotteville, Woodhouse and South Walsingham townships. The medium infestations that occurred on two witch-hazel shrubs at Spooky Hollow, Charlotteville Township, and on one shrub at the Rockway Gorge, Louth Township in 1964 subsided in 1965.

This insect causes spiny galls on the flower buds of witch-hazel. It was not found in the alternate stage on the secondary host, white birch.

On August 7 a mass collection of 250 witch-hazel galls was submitted to the laboratory for trans-shipment to England, for use in connection with biochemical studies.

Fall Webworm, Hyphantria cunea (Drury)

A general upward trend in infestations of this insect occurred throughout the district. Medium infestations occurred from Wallaceburg to Ojibway in Essex County, and low numbers were observed on many deciduous hosts at numerous other points in the district.

Heavy infestations persisted on Pelee Island where eastern choke cherry was the favourite host. A mass collection of late-stage larvae was made on the island for shipment to the Soviet Union for parasite studies.

Eastern Tent Caterpillar, Malacosoma americanum (F.)

Heavy infestations recurred along Highway 21 from Grand Bend to The Cut, and along roads in Pinery Provincial Park, Bosanquet Township (Table 15). The old tents on cherry shrubbery in this area were very unsightly in July and August.

Medium infestations of this insect occurred in the Newbury-Bothwell area, and on scattered clumps of trees in Bertie, Cayuga North and Dunn townships. Light infestations were observed at numerous points elsewhere in the district.

TABLE 15

Summary of Eastern Tent Caterpillar Colony Counts
in Lake Erie District in 1964 and 1965

Location (township)	Sample unit	No. of colonies per sample unit	
		1964	1965
Bosanquet	1 mile of roadside	400+	400+
McGillivray	1 square chain plot	1	1
Moulton	1 mile of roadside	2	1
South Walsingham	1 mile of roadside	1	1
West Nissouri	1 square chain plot	5	4
Woodhouse	1 mile of roadside	1	2
Yarmouth	1 square chain plot	2	1
Zone	1 mile of roadside	5	3

White Pine Weevil, Pissodes strobi (Peck)

A marked decline in numbers of this pest occurred in the Turkey Point Forest Nursery in 1965 where control measures were carried out in midsummer, 1964. Control consisted of hand-clipping and burning infested leaders. Only one infested shoot was found in this 5-acre compartment in 1965. Low populations were recorded at sampling points in the district (Table 16).

TABLE 16

Summary of Damage by the White Pine Weevil in Lake Erie District in 1964 and 1965

Location (township)	Av. d.b.h. in inches	Per cent of white pine trees infested	
		1964	1965
Charlotteville	2	9	1
South Walsingham	1	1	2
Thorold	2	3	3

TABLE 17

Summary of Miscellaneous Insects Collected in Lake Erie District in 1965

Insect	Host(s)	Remarks
<i>Acronicta interrupta</i> Gn.	wE, Ch	Moderate on a domestic cherry tree near Florence, Dawn Twp., in association with <u><i>A. interrupta elizabetha</i></u> ; light on elms south of Thamesville.
<i>Acronicta lepusculina</i> Gn.	Co, W	Heavy on 2-foot tree in St. Williams Nursery; moderate on willows on Pelee Island; light on Walpole Island.
<i>Adalia bipunctata</i> Linn.	Haw	Common at Navy Hall Museum, Niagara-on-the-Lake.
<i>Agonopteryx costimacula</i> Clke.	Hoptree grape	Moderate at south tip of Pelee Island. Defoliation heavy at city park in city of Niagara Falls.
<i>Altica ulmi</i> Wood	wE	Heavy on one tree, DeCou House; light at McKay Forest.
<i>Anisota rubicunda</i> Fabr.	siM	Heavy on one tree in Harwich Twp.; light on tree in South Cayuga Twp.
<i>Anomoea laticlavata</i> Frost	bl Lo, trefoil	Adult feeding moderate at Turkey Point Nursery.
<i>Antheraea polyphemus</i> Cram.	bO, wO, sM	Six larvae from Dawn Twp. sent to Dr. Vaughan; light elsewhere.

TABLE 17 (continued)

Insect	Host(s)	Remarks
<i>Antispila nyssaefoliella</i> Clem.	black gum	Heavy mining recurred at Byng Conservation Area; premature leaf drop.
<i>Aphrophora parallela</i> Say	scP	Very common near Turkey Point Golf Club.
<i>Argyresthia aureoargentella</i> Brower	eC	Light to medium on shaded trees in Caradoc Twp.
<i>Argyresthia</i> sp.	eC	Very heavy on a few trees in Yarmouth Twp. gravel pit; damage conspicuous.
<i>Argyresthia thuiella</i> Pack	eC	Light to medium near Strathoy, Caradoc Twp., in association with <u>A. aureoargentella</u> .
<i>Argyrotaenia pinatubana</i> Kft.	wP	Remain medium to heavy at Bethel Park in Aldborough Twp. Often 4 or 5 tubes on tips of current growth are quite noticeable.
<i>Atomacera debilis</i> Say	trefoil	Infestations remain at Backus Tract, Point Pelee and other points.
<i>Atteva aurea</i> Fitch	tree-of-heaven	Heavy infestations at Scudder, Pelee Island in 1964 declined to light intensity in 1965 as most shrubs had been cut down.
<i>Automeris io</i> Fabr.	Bu	Six larvae from Fingal sent Dr. Smith.
<i>Cecidomyia</i> sp.	bladdernut, Wi, Hazelnut	Fruits of bladdernut heavily infested at Pinery Park; moderate recurrence in hazelnut fruits at Spooky Hollow.
<i>Choristoneura fumiferana</i> Clem.	nS, wS	Light in Canborough and Woodhouse twps.
<i>Choristoneura pinus</i> Freem.	scP	Light in Euphemia Twp.
<i>Chrysoclista linneella</i> Clerck	Eur. linden	Further studies on life history at St. Catharines.
<i>Chrysomela</i> sp. (prob. <i>scripta</i>)	Co	Medium at River Canard, Anderdon Twp. and Erieau, Harwich Twp.; larvae also fed on petioles.
<i>Datana contracta</i> Wlk.	wO	Medium on lower crown of tree in Pinery Provincial Park.
<i>Datana drexeli</i> Hy. Edw.	Haw	Light near Hagersville.
<i>Datana perspicua</i> G. & R.	Su	Moderate on shrub in Thorold Twp.; recurred near Port Rowan but declined to light intensity; light near Thamesville.
<i>Diapheromera femorata</i> Say	Ba, rO	Light at Turkey Point Nursery and Point Pelee nature trail; one adult at latter point parasitized.
<i>Diplolepsis rosae</i> (Linn.)	wild rose	Moderate on plant on the Backus Mill nature trail.
<i>Epinotia aceriella</i> Clem.	sM	Heavy on lower branches of two trees at John E. Pearce Provincial Park.

TABLE 16 (continued)

Insect	Host(s)	Remarks
<i>Epinotia</i> sp. (prob. <i>walkerana</i>)	Hazelnut	Heavy at Vanessa Conservation Area; moderate numbers recurred at Spooky Hollow.
<i>Erannis tiliaria</i> Harr.	wE	Further marked decline; only at two points.
<i>Euphorbia inda</i> Linn.	cE	Numerous on ornamentals near Rondeau Park.
<i>Exoteleia dodecella</i> Linn.	scP	Light on plantings in Bayham and Romney twps.
<i>Exoteleia pinifoliella</i> Cham.	jP	Remain light to moderate on several trees at Allanburg, Thorold Twp.
<i>Fenusa ulmi</i> Sund.	wE	Mining heavy on ornamentals near Rodman Hall, St. Catharines; light at St. Thomas court house.
<i>Gossyparia spuria</i> (Modeer)	rE, wE	Heavy on tree at DeCou House, Grantham Twp.; light at McKay Forest.
<i>Gretchena delicatana</i> Heinr.	horn-beam	Rock Glen Conservation Area.
<i>Halisidota caryae</i> Harr.	Ba, Bu, Wi	Large colony and parasitized eggs at Backus Tract; light at Rock Glen Park, Fingal and other points.
<i>Hippodamia convergens</i> Guer.	cE, Co	Heavy on Chinese elm shade trees near Rondeau Park; light at Erieau.
<i>Holcocera immaculella</i> McD.	rP, Su	Heavy in fruits of sumac near Port Burwell; light elsewhere.
<i>Hormaphis hamamelidis</i> (Fitch)	Wi	Moderate at Rock Glen Conservation Area.
<i>Hydria prunivorata</i> Ferg.	pCh	Heavy on tree at Reynolds Tract in Howard Twp.; on tree in Pelham Twp.
<i>Ichthyura inclusa</i> Hbn.	tA, Co	Moderate at South Woodslee, Rochester Twp. and on Walpole Island; light at the Reynolds Tract in Howard Twp.
<i>Lithocolletis hamameliella</i> Busck.	Wi	Light at Spooky Hollow, Port Burwell, County plantation 21 in Norfolk County, and other points.
<i>Lithocolletis ostensackenella</i> Fitch	bl Lo	Heavy near Compartment X-6 in St. Williams Nursery.
<i>Lithocolletis salicifoliella</i> Chamb.	tA	Light at Reynolds Tract and the Backus Mill nature trail.
<i>Macrophya punctumalbum</i> L.	Privet	Further studies on life history at St. Catharines.
<i>Nematus ventralis</i> Say	tA	Medium on two trees at Spooky Hollow.
<i>Neurotoma fasciata</i> (Nort.)	blCh, pCh	Heavy on pin cherry at Turkey Point Nursery; light on 5 branches of mature tree at Pinafore Park; light at other points; numbers increased over three previous years.

TABLE 16 (continued)

Insect	Host(s)	Remarks
<i>Nymphalis antiopa</i> Linn.	Hack, wE, W	Moderate on 25-foot white elm near Aylmer; light at several points; two extension calls; numbers higher than three previous summers.
Olethreutidae (prob. <i>Laspeyresia</i> sp.)	scP	Common in lower stems of Christmas trees in Newbury area in early June.
<i>Orgyia leucostigma</i> J. E. Smith	S, M, Sy	Caused severe defoliation of small numbers of trees in Gosfield North, Mersea and Ekfrid townships. Light damage at several other locations.
<i>Paleacrita vernata</i> Peck	wE	Only one larva; considerable decline over 1964 populations.
<i>Pantographa limata</i> G. & R.	Ba	Larval populations caused light to severe defoliation in clumps of host trees at several locations in the district.
<i>Papilio cresphontes</i> Cram.	hoptree	Seven larvae on shrub near Rondeau Park; light at Point Pelee National Park and on Pelee Island.
<i>Pemphigus populi-transversus</i> Riley	Co	Moderate on a few trees on east side of Pelee Island.
<i>Petrova albicapitana</i> Busck.	jP	Over 100 nodules on one tree near the canal in Niagara Falls.
<i>Pikonema alaskensis</i> (Roh.)	wS	Remained light in small park in North Cayuga Twp.; rare in Norfolk County.
<i>Pineus strobi</i> (Htg.)	wP	Heavy on a few trees at Bethel Park, Aldborough Twp.
<i>Plagiodera versicolora</i> Laich.	W	Heavy defoliation on shrub in Crowland Twp.
<i>Polygonia interrogationis</i> Fabr.	wE, Hack	Moderate on solitary trees in Seneca Twp., Holiday Beach Provincial Park, and on Pelee Island; light elsewhere. Population increase over other years.
<i>Pristiphora geniculata</i> (Htg.)	sMo	Medium on two trees at McKay Forest; light at Niagara Falls.
<i>Profenusa thomsoni</i> (Konow)	wB	Light at Byron Bog.
<i>Proteoteras aesculana</i> Riley	siM, moM	Tip borers medium to heavy at Frechette Section, St. Williams Nursery in mid-June; fruits of mountain maple at Spooky Hollow infested in early September.
<i>Pulicalvaria piceaella</i> Kft.	nS	Moderate at Wainfleet Twp. park.
<i>Schizura concinna</i> A. & S.	Wa	One colony in Effingham Valley.
<i>Scolytus multistriatus</i> Marsh.	wE, cE	Remain high throughout the district; adults numerous in early June. Many Chinese elm ornamentals near Rondeau Park were attacked.

TABLE 16 (continued)

Insect	Host(s)	Remarks
<i>Sibine stimulea</i> Clemens	Ba, Hack	New provincial record; solitary larvae at Point Pelee nature trail.
<i>Spilochalcis melana</i> Burks.	trefoil	First Canadian record of this parasite. Chalcids reared from material submitted in 1963.
<i>Systema marginalis</i> (Illiger)	bur O	Heavy skeletonizing by beetles near Hillman, Mersea Twp. A new record in Ontario.
<i>Tremex columba</i> (Linn.)	wE	Large numbers of adults on trees at South Thorold died when trapped by ovipositors.
<i>Trichiocampus viminalis</i> (Fall.)	Co, lPo	Moderate to severe defoliation in Bosanquet, South Dorchester, Thorold and Walpole twps.
<i>Vespamia pini</i> Kell.	scP	Light on all shade trees at Rodman Hall in St. Catharines; light at other points.