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Status of Insects in the Chapleau  
District

Ingram, Wayne

Information Report  
(Forest Research Laboratory, Ontario Region)

O-X-94



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 Ontario, 1968

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Photographs

Regional Supervisors \*

## FOREWORD

The Forest Insect and Disease Survey maintains a continuing interest in improving existing sampling methods and in developing new techniques for rating forest pests and appraising damage. In 1968, a new approach for evaluating incidence and levels of infection of a number of tree diseases was explored. This involved determining degrees of damage in random and non-random plots in relation to the basal area of infected stands, the ultimate objective being to provide information on the impact of the organisms on forest stands in Ontario. Studies during the winter to test the accuracy of the new sampling system will be useful for planning field work in 1969. Improvement of insect survey methods in 1968 was largely directed toward jack-pine budworm sampling with emphasis on egg population studies. To this end, the distribution of egg masses on individual branches and at various crown levels of sample trees was investigated as a basis for determining the nature and size of samples required to assess population levels. The value of these new approaches in disease and insect sampling will be proven with use in forthcoming field seasons.

Marked changes in insect and disease conditions were recorded in large areas of the Province in 1968. A sharp increase in population levels of the spruce budworm and jack-pine budworm occurred in many parts of Ontario. The largest areas of infestation of the spruce budworm were located in the Burchell Lake area in the Port Arthur District, in parts of the Chapleau, Kapuskasing and Swastika districts and in southeastern Ontario. Localized infestations were centered in Parkinson Township in the Sault Ste. Marie District and in Fairbanks Township west of Sudbury. Egg surveys in most of the above areas except Burchell Lake, indicated that infestations will increase in extent in 1969.

The chemical control operation undertaken by the Ontario Department of Lands and Forests against the spruce budworm in the Burchell Lake area dominated insect surveys in western Ontario during several periods from May until September. Technicians were involved in intensive sampling to delineate the area to be treated, to time the spray applications and to assess spruce budworm numbers before and after the control operation.

Infestations of the jack-pine budworm abated somewhat in the Kenora and Fort Frances districts but several years of severe defoliation, particularly on rocky sites, caused considerable crown damage. In parts of the Sault Ste. Marie and Pembroke districts very severe defoliation of both jack pine and red pine was reported. Other insects occurring in particularly high numbers in 1968 included the saddled prominent, larch casebearer and several species of cedar leaf miners.

Devastation of elm by Dutch elm disease continued in southern Ontario and numerous new centers of infection were found throughout a large part of the range of elm in central Ontario. A vector of Dutch elm disease, the smaller European elm bark beetle extended its range eastward along the north shore of Lake Ontario and St. Lawrence River. Hypoxylon canker of poplar proved to be a serious problem in many parts of Ontario. Evaluations revealed particularly high levels of infection in aspen stands in the Sault Ste. Marie and Sudbury districts. Scleroderris canker of pine again caused considerable

mortality in young red pine and jack pine plantations in parts of central and northeastern Ontario. Fomes root rot usually associated with thinning operations, caused varying amounts of mortality in red pine plantations in southern Ontario. Four new centers of infection of this disease were found in Larose forest in the Kemptville District in 1968. Details on the above and other noteworthy insect and disease problems are contained in the report that follows.

J. E. MacDonald

STATUS OF INSECTS IN THE CHAPLEAU DISTRICT in 1968

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Wayne Ingram

Birch Sawfly, Arge pectoralis (Leach)

Numerous light infestations were observed in the district on open-grown white birch regeneration. One area of moderate to heavy defoliation was recorded in Ivanhoe Provincial Park in Ivanhoe Township where trees up to ten feet in height were stripped of foliage (see photo). The affected trees were open grown along a sandy beach in an area of approximately ten acres.

A Gelechiid, Chionodes obscurusella Cham.

This Gelechiid on Manitoba maple has become well established in the town of Chapleau in the past few years. Manitoba maple trees up to 60 feet in height have been severely defoliated for the past two years and some branch mortality has occurred. Because of damage by this insect and an unidentified disease condition numerous trees have been removed as a safety measure. To date only Manitoba maple trees have been affected.

Spruce Budworm, Choristoneura fumiferana (Clem.)

A major increase in the extent and intensity of spruce budworm infestations occurred in the district in 1968 (see map).

The infestation east of Chapleau, comprising about 108 square miles in 1967, spread northward and eastward into Division 68 to cover an area of approximately 320 square miles. Varying degrees of defoliation were recorded in a triangular area from Cochrane and Gamey townships north to Copperfield Township. Pockets of light to severe defoliation are forecast for this area in 1969 (Table 7). To the east moderate defoliation occurred in an area of about 700 acres in Ivanhoe Township and a smaller pocket of moderate defoliation was recorded in Keith Township. Moderate to severe defoliation is forecast for this area in 1969.

Host stands in an area of approximately 450 square miles in the northern part of the Chapleau District and the southern portion of the Kapuskasing District suffered light to heavy defoliation. This infestation extended from Nebotik to Belford townships in the Chapleau District through spruce and balsam stands that escaped the last major outbreak. Generally moderate to light defoliation was found in the area but pockets of heavy defoliation occurred in Kapuskasing, Conking and Amunsden townships. A general build-up is expected in this area in 1969 and severe infestations can be expected in Wadsworth, Steffanson, Kapuskasing, Conking and Amunsden townships.

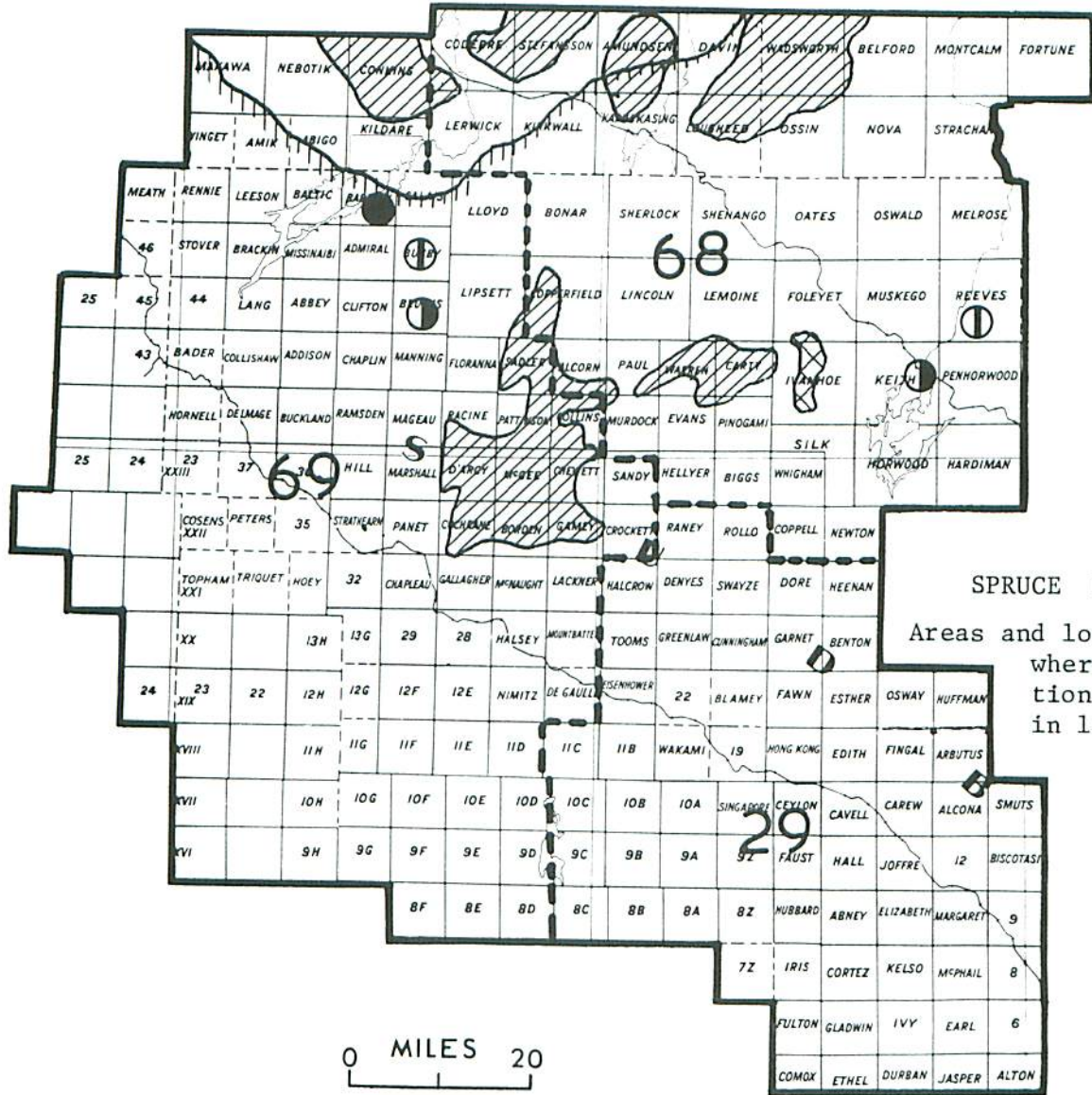
Because of the importance of the insect and the probability of major increases in population levels intensive surveys are planned for the 1969 field season.

TABLE 7

A Summary of Egg Cluster Counts, Current Defoliation Tallies and Defoliation Forecasts for 1969 in the Chapleau District

| Location<br>(township) | (specific location)        | Per cent<br>defol.<br>in 1968 | No. of egg clusters<br>per 100 sq. ft.<br>of foliage | Forecast<br>for 1969 |
|------------------------|----------------------------|-------------------------------|--|----------------------|
| Amunsden               | Lot 9 Con. IV              | 63                            | 298  | S                    |
| Barclay                | Camp grounds               | 27                            | 118  | S                    |
| Borden                 | Lot 8 Con. III             | 43                            | 250  | S                    |
| Chewett                | Lot 6 Con. II              | 23                            | 84   | M                    |
|                        | Lot 7 Con. I *             | 24                            | 60   | M                    |
| Cochrane               | W. bay of Henderson Lake   | 2                             | 10   | L-M                  |
|                        | W. bay of Chapleau River   | 2                             | --   | Nil-L                |
|                        | Lot 5 Con. III             | 2                             | --   | Nil-L                |
|                        | Lot 8 Con. II              | 2                             | 22   | L-M                  |
|                        | Lot 9 Con. II *            | 47                            | 62   | M                    |
| Conking                | Lot 13 Con. IX             | 33                            | 55   | M                    |
|                        | Lot 2 Con. IV              | 61                            | 242  | S                    |
|                        | Lot 9 Con. VI              | 13                            | 13   | L                    |
| Copperfield            | Shewabik Lake              | 22                            | 62   | M                    |
| Dale                   | Lot 5 Con. VII             | 10                            | 32   | L-M                  |
| D'arcy                 | E. bay of Henderson Lake   | 6                             | 10   | L                    |
|                        | Upper end of D'arcy Lake   | 13                            | --   | Nil-L                |
|                        | S.W. end of Henderson Lake | 3                             | --   | Nil-L                |
|                        | E. bay of Racine Lake      | 9                             | 12   | L                    |
|                        | W. bay of Racine Lake      | 19                            | 27   | L-M                  |
| Enid                   | S.W. corner of Township    | 2                             | --   | N-L                  |
| Foleyet                | Lot 7 Con. II *            | 46                            | 135  | M-S                  |
| Gallagher              | Lot 12 Con. V              | 3                             | --   | Nil-L                |
|                        | Lot 12 Con. V *            | 1                             | --   | Nil-L                |
| Horwood                | Lot 2 Con. III             | 12                            | 57   | M                    |
| Ivanhoe                | Lot 14 Con. IX             | 42                            | 132  | M-S                  |
| Kapuskaasing           | Lot 2 Con. IX              | 59                            | 25   | L-M                  |
|                        | Lot 16 Con. VIII           | 10                            | 80   | M                    |
| Keith                  | Lot 9 Con. VIII *          | 25                            | 72   | M                    |
| Lerwick                | N.W. corner of Township    | 30                            | 16   | L                    |
| Lougheed               | Long Lake                  | 12                            | 48   | M                    |
|                        | S.E. corner of Township    | 7                             | 50   | M                    |

# CHAPLEAU DISTRICT



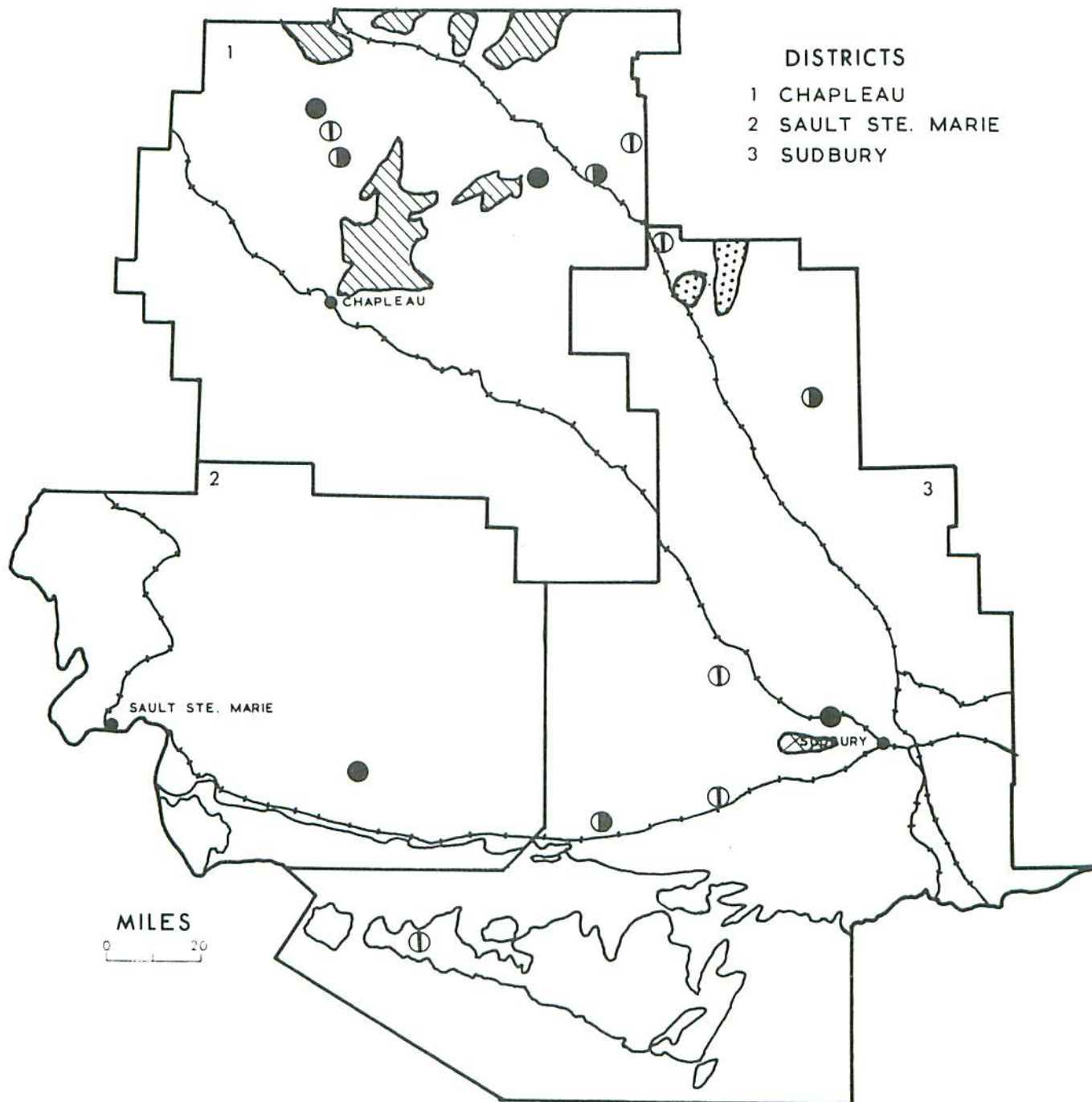
SPRUCE BUDWORM  
Areas and locations  
where defoliation  
occurred  
in 1968

## Legend

- Light defoliation ----- ○  
 Medium defoliation ----- and ○  
 Severe defoliation ----- and ●
- Northern boundary of area where heavy mortality of mature balsam-fir occurred in the last major outbreak -----



# CENTRAL FOREST REGION



## DISTRICTS

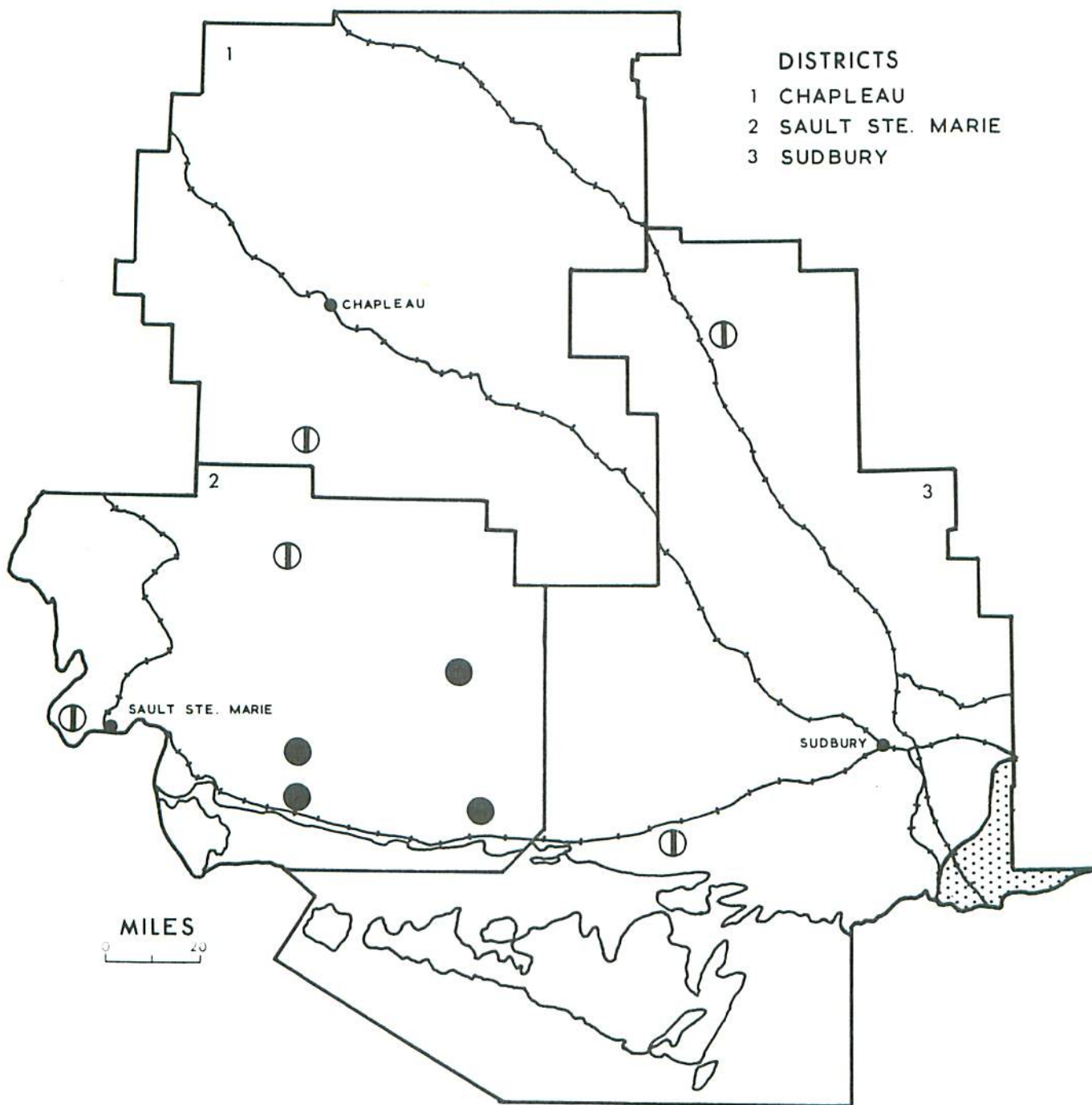
- 1 CHAPLEAU
- 2 SAULT STE. MARIE
- 3 SUDBURY

SPRUCE BUDWORM  
Areas and locations where defoliation  
was observed in 1968

### Legend

- Light defoliation ----- and ①
- Moderate defoliation ----- and ●
- Severe defoliation ----- and ●

# CENTRAL FOREST REGION



## JACK PINE BUDWORM

Areas and locations where defoliation was observed in 1968

### Legend

Light defoliation ----- ○ and [stippled box]  
Severe defoliation ----- ●

TABLE 7 (concluded)

| Location<br>(township) | (specific location)     | Per cent<br>defol.<br>in 1968 | No. of egg clusters<br>per 100 sq. ft.<br>of foliage | Forecast<br>for 1969 |
|------------------------|-------------------------|-------------------------------|--|----------------------|
| McGee                  | Lot 7 Con. VI           | 22                            | 60   | M                    |
|                        | Lot 1 Con. V            | 46                            | 722  | S                    |
|                        | Lot 9 Con. II           | 43                            | 125  | M-S                  |
| Montcalm               | Lot 10 Con. III         | 7                             | 6  | L                    |
| Nebotic                | Lot 2 Con. III          | 24                            | 10   | L                    |
|                        | N.E. corner of Township | 10                            | 80   | M                    |
| Ossin                  | Ossin Lake              | 9                             | 35   | L-M                  |
| Penhorwood             | Lot 27 Con. I           | 3                             | 22   | L-M                  |
|                        | Lot 26 Con. VI          | 12                            | 57   | M                    |
| Racine                 | N.E. Bay of Racine Lake | 7                             | 7  | L                    |
|                        | Lot 8 Con. I            | 2                             | --   | Nil-L                |
|                        | Old mill site           | 11                            | 12   | L                    |
| Sadler                 | Robson Lake             | 21                            | 200  | S                    |
| Silk                   | Lot 28 Con. XII         | 5                             | 54   | M                    |
| Steffanson             | Little Steffanson Lake  | 25                            | 190  | S                    |
| Wadsworth              | Paul Lake               | 36                            | 141  | M-S                  |
|                        | Little Paypeeskek River | 25                            | 180  | S                    |
|                        | Lot 17 Con. V           | 30                            | 117  | M-S                  |
|                        | E. side of Township     | 30                            | 73   | M                    |
|                        | Komak Lake              | 17                            | 40   | L-M                  |

\* Based on regular six branch sample.

Jack-pine Budworm, Choristoneura pinus pinus Free.

A general increase in population levels of this insect was recorded in the district in 1968. An area of light defoliation was observed near Flame Lake in Township 8D on planted white pine and natural jack-pine trees. Low populations were observed in Calais and 11C townships as well as Township 43 and Township 23 Range 16. Low numbers of moths were obtained in the black light trap set up in Panet Township from mid-July to the end of August.

Larch Casebearer, Coleophora laricella (Hbn.)

An increase in numbers of this insect was observed in the district in 1968. A pocket of heavy infestation occurred in Chapleau Township and light infestations persisted in Hoey and Muskego townships and in Township 29 (Table 8). Negative results were obtained at sample points in Nimitz Township and in Township 9D.

TABLE 8

Summary of Larch Casebearer Larval Counts in the Chapleau District  
from 1966 to 1968

Note: Counts were based on the examination of four 18" branch tips  
from each of four trees at each location.

| Location<br>(township) | Av. d.b.h. of sample<br>trees in inches | Average number of larva<br>per 18" branch tip |      |      |
|------------------------|---|---|------|------|
|                        |   | 1966  | 1967 | 1968 |
| Chapleau               | 4                                       | 0.6   | 0    | 19.7 |
| Muskego                | 6                                       | --  | 0    | .4   |
| 29                     | 5                                       | --  | --   | 1.5  |
| Hoey                   | 5                                       | 3.0   | .9   | 2.8  |

Birch Leaf Miner, Ferusa pusilla (Lep.)

An increase in population levels of this insect was noted in the district in 1968. First recorded in 1966, the insect is now well established in the southern portion of the district (Table 9). Defoliation in a pocket of infestation in Durban Township increased from 58 per cent in 1966 to 82 per cent in 1968. A heavy infestation was also recorded on roadside regeneration in Township 22 Range 17. Numerous light infestations were recorded elsewhere in the district and alder as well as white birch was infested in Township 11G.

TABLE 9

Summary of Damage Caused by the Birch Leaf Miner in the Chapleau District  
in 1968

Note: Counts were based on a total of 100 leaves from four branches  
from each of three trees at each location.

| Location<br>(township) | Host(s) | Av. height of sample<br>trees in feet | Percentage of leaves mined |
|------------------------|---------|---------------------------------------|----------------------------|
| 11G                    | wB      | 12                                    | 21                         |
| 11G                    | Alder   | 5                                     | 8                          |
| Durban                 | wB      | 12                                    | 82                         |
| 22 Range 17            | wB      | 20                                    | 32                         |
| 32                     | wB      | 8                                     | 9                          |

Western Tent Caterpillar, Malacosoma californicum pluviale Dyar

A general increase in population levels was noted in the district in 1968. The highest number of colonies was observed in Chapleau Township where five tents per mile of roadside were counted (Table 10). Elsewhere in the district occasional tents were observed on roadside pin cherry and white birch.

TABLE 10

Summary of Western Tent Caterpillar Larval Colony Counts  
in the Chapleau District from 1966 to 1968

| Location<br>(township) | Host(s) | Number of tents per mile of roadside |      |      |
|------------------------|---------|--------------------------------------|------|------|
|                        |         | 1966                                 | 1967 | 1968 |
| 8D                     | pCh     | 3                                    | 0    | 1    |
| 11C                    | pCh     | 1                                    | 1    | 2    |
| Chapleau               | pCh, wB | -                                    | -    | 5    |
| Floranna               | pCh, wB | 6                                    | 5    | 4    |
| Marshall               | pCh     | -                                    | -    | 3    |
| Panet                  | pCh     | 1                                    | 3    | 2    |
| Silk                   | pCh     | 12                                   | 11   | 3    |

Red-pine Sawfly, Neodiprion nanulus nanulus Schedl

This insect declined in numbers compared with the past three years. One area of very light infestation was observed in Chapleau Township where a count of 0.8 colonies per tree was recorded. An overall average of 2.2 colonies per tree was recorded in 1967 compared with an average of 0.3 colonies per tree in 1968.

Red-headed Jack-pine Sawfly, Neodiprion virginianus complex

This insect occurred commonly in small numbers in the district in 1968. A pocket of heavy defoliation persisted near Woman River in Benton Township for the fourth consecutive year. Light infestations were observed at numerous locations in the remainder of the district (Table 11).

TABLE 11

Summary of Red-headed Jack-pine Sawfly Larval Colony Counts in the Chapleau District from 1966 to 1968

| Location<br>(township) | Av. d.b.h. of sample<br>trees in inches | Average no. of colonies per tree |      |      |
|------------------------|---|----------------------------------|------|------|
|                        |   | 1966                             | 1967 | 1968 |
| 9D                     | 2                                       | 0.3                              | 2.4  | 0    |
| Panet                  | 3                                       | 0                                | 0.1  | 0.2  |
| Wakami                 | 4                                       | 0.2                              | 0.5  | 0.1  |
| Brutus                 | 3                                       | 0.1                              | 0.1  | 0.3  |
| Benton                 | 4                                       | 0.6                              | 5.5  | 5.2  |
| Ivanhoe                | 3                                       | 0.7                              | 0.3  | 0.4  |
| Durban                 | 3                                       | ---                              | ---  | 1.8  |
| Halsey                 | 2                                       | ---                              | ---  | 0.8  |
| 28                     | 4                                       | ---                              | ---  | 0.4  |

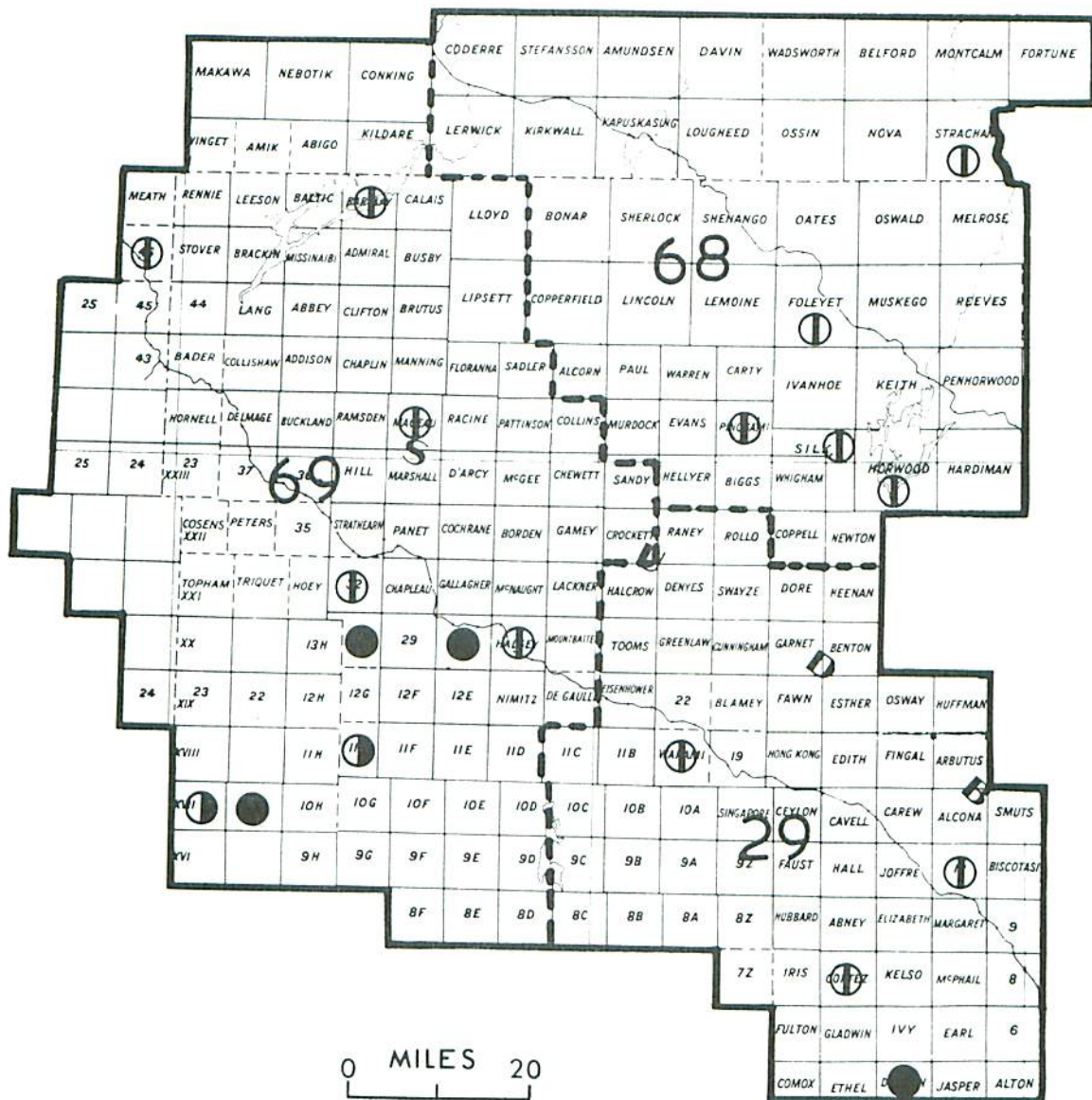
Yellow-headed Spruce Sawfly, Pikonema alaskensis (Roh.)

Light to moderate defoliation was observed on individual trees in the district in 1968. Severe defoliation persisted on 12-foot trees in the Catholic cemetery in Chapleau and on a windbreak in the Chapleau nursery.

Larch Sawfly, Pristiphora erichsonii Htg.

Numerous pockets of defoliation were observed in the district in 1968. Heavy defoliation was recorded on roadside trees in the townships of Stover, Rennie and Borden and in Township 46. Light to moderate defoliation occurred in larch stands along Highway 129 south in townships 10D, 11D, 10E and 9D. Light infestations were observed in Muskego, Silk, Horwood and Chewett townships.

# CHAPLEAU DISTRICT



## LEAF MINERS ON BIRCH

Locations where infestations of two leaf miners;  
Profenusa thomsoni (Lonow) and Fenusa pusilla (Lep.)  
 were observed in 1968

### Legend

- Light infestation --- (○)
- Medium infestation -- (◐)
- Severe infestation -- (●)

Mountain Ash Sawfly, Pristiphora geniculata Htg.

Infestations of this introduced insect were found commonly in the district in 1968. Heavy defoliation of roadside trees occurred in Cochrane, 11H and Smuts townships and in townships 23 Range 16 and 22 Range 18. Moderate defoliation was observed in Halsey Township and Township 28. In the remainder of the district light pockets of defoliation were common, particularly along Highway 129 south in townships 10D and 11D.

Amber-marked Birch Leaf Miner, Profenusa thomsoni (Konow)

Population levels declined slightly at sample points in the district in 1968. Heavy defoliation was recorded in townships 28 and 136. Light to moderate defoliation occurred at numerous points elsewhere in the district (Table 12).

TABLE 12

Summary of Damage Caused by the Amber-marked Birch Leaf Miner to the Foliage of White Birch in the Chapleau District in 1968

Note: Counts were based on a total of 100 leaves from four branches from each of three trees at each location.

| Location<br>(township) | Average height of sample<br>trees in feet | Percentage of leaves mined |
|------------------------|---|----------------------------|
| 13G                    | 25  | 62                         |
| 28                     | 20  | 57                         |
| Halsey                 | 18  | 14                         |
| 46                     | 20  | 6                          |
| 23 Rge. 17             | 12  | 7                          |
| Barclay                | 15  | 14                         |
| Silk                   | 10  | 9                          |



Spruce Bud Midge, Rhabdophaga swainei Felt

This insect occurred commonly in the district in 1968. The highest number was counted at a sample point in Sandy Township where 6 per cent of the terminal buds were infested (Table 13). Light damage to terminal buds was observed at numerous points elsewhere in the district.

TABLE 13

Summary of Buds Damaged by the Spruce Bud Midge at Five Points in the Chapleau District from 1966 to 1968

Note: Counts were based on the examination of ten branch tips from each of ten trees at each location.

| Location<br>(township) | Tree species | Per cent of terminal buds infested |      |      |
|------------------------|--------------|------------------------------------|------|------|
|                        |              | 1966                               | 1967 | 1968 |
| 24 Range XXII          | bS           | 5.1                                | 2.8  | 2.1  |
| 29                     | bS           | 3.9                                | 0    | 2.9  |
| Sandy                  | bS           | 6.4                                | 4.7  | 6.0  |
| 9D                     | bS           | 5.4                                | 3.8  | 2.6  |
| Arbutus                | bS           | 1.2                                | 1.0  | 0    |

Pine Tip Moth, Rhyacionia adana Heinr.

This insect was found in six seed beds in the Chapleau nursery affecting 3-0 red pine stock. Approximately 4 per cent of the stock was infested. Numerous pupal cells were found at ground level along the stems of red pine seedlings in late September and unless some control is exercised the infestation will probably recur in 1969.

TABLE 14

Summary of Miscellaneous Insects Collected in Chapleau District in 1968

| Insect                          | Host(s) |   |
|---------------------------------|---------|---|
| <i>Acleris variana</i> Fern.    | WS      | Low numbers in beating tray samples in Gallagher and Borden townships |
| <i>Altica corni</i> Woods       | Do      | Light infestation in Panet Twp.                                       |
| <i>Aphrophora parallela</i> Say | JP      | Light infestation on open-grown trees in Borden Twp.                  |
| <i>Archippus strianus</i> Fern. | WS      | Found commonly in the spruce budworm infestation around Chapleau      |

TABLE 14 (continued)

| Insect                                  | Host(s)                  | Remarks   |
|---|--------------------------|---|
| <i>Archips argyrospilus</i> Wlk.        | tA                       | Light infestation in Chapleau Twp.  |
| <i>Archips cerasivoranus</i> Fitch      | wB, pCh,<br>cCh<br>Aster | Heavy defoliation recorded in Ivanhoe Twp. with 140 tents per square chain plot |
| <i>Argyresthia laricella</i> Kft.       | tL                       | Light defoliation to fringe trees in Hoey Twp.                                  |
| <i>Argyrotaenia tabulana</i> Free.      | jP                       | Light defoliation to a small stand of jack-pine trees in Township 11G           |
| <i>Bucculatrix canadensisella</i> Cham. | wB                       | Moderate infestation on 20 foot trees in Twp. 9E                                |
| <i>Choristoneura conflictana</i> Wlk.   | bPo, tA                  | Light infestations in Chapleau Twp. and Twp. 32                                 |
| <i>Choristoneura rosaceana</i> Harr.    | bPo                      | Light infestation in Chapleau Twp.  |
| <i>Clepsis persicana</i> Fitch          | Aster                    | Light infestation in burned over area in Twp. 32                                |
| <i>Coleophora innotabilis</i> Braun     | tA                       | Light patches of defoliation in Chapleau Twp. and Twp. 32                       |
| <i>Coleophora pruniella</i> Clem.       | pCh                      | Low numbers on roadside pin cherry regeneration in Chapleau Twp.                |
| <i>Compsolechia niveopulvella</i> Cham. | tA                       | Light defoliation on aspen regeneration in Gallagher Twp.                       |
| <i>Dioryctria abietivorella</i> Grt.    | jP                       | Light defoliation in Durban Twp. and twps. 28 and 29                            |
| <i>Dioryctria reniculella</i> Grt.      | wS, bF                   | Found commonly throughout the district in beating tray samples                  |
| <i>Disonycha alternata</i> Ill.         | W                        | Light defoliation in Ivanhoe Twp.   |

TABLE 14 (continued)

| Insect                                    | Host(s)  | Remarks  |
|---|----------|--|
| <i>Enargia decolor</i> Wlk.               | tA       | Light infestation in Chapleau Twp.   |
| <i>Epinotia criddleana</i> Kft.           | tA       | Light defoliation in Gallagher Twp.  |
| <i>Epinotia lindana</i> Fern.             | Do       | Light defoliation to dogwood shrubs in Chapleau Twp.   |
| <i>Epinotia solandriana</i> Linn.         | tA       | Lightly defoliated roadside regeneration in Gallagher Township   |
| <i>Feralia jocosa</i> Gn.                 | bF       | Low numbers observed in beating tray samples in Borden Township  |
| <i>Gonioctena americana</i> Schaeef.      | tA       | Observed throughout the district but the larvæ died before any real damage occurred (possible late frost)                  |
| <i>Gretchena semialba</i> McD.            | Al       | Found commonly throughout the district feeding in terminal buds on alder   |
| <i>Halisidota maculata</i> Harr.          | W        | Light defoliation along the lakeshore in Ivanhoe Twp.  |
| <i>Hypagyrtis piniata</i> Pack.           | bF       | Low numbers observed in beating tray samples in Borden Township  |
| <i>Ips pini</i> Say                       | jP Poles | Heavy infestation in poles stored at Devon siding in Gallagher Twp.  |
| <i>Lithocolletis betulivora</i> Wlshn.    | wB       | Light infestation in a logged over area in Silk Twp.   |
| <i>Lithocolletis salicifoliella</i> Cham. | bPo      | Heavy infestations in Twp. 23 Rge. 17 and in twps. 23 and 46. A light infestation in McGee Township had 3.2 mines per leaf |

TABLE 14 (continued)

| Insect   | Host(s) | Remarks  |
|--|---------|--|
| <i>Lambdina fiscellaria fiscellaria</i><br>Gn.                 | bF      | Found commonly in Borden Twp. and Twp. 32  |
| <i>Lepyrus alternatus</i> Csy.                                 | W       | Large weevil found commonly on lakeshore shrubs in Ivanhoe Twp.  |
| <i>Malacosoma disstria</i> Hbn.                                |         | Examination of material from the black-light trap in Panet Twp. revealed that 495 males and 6 females were obtained between July 15 and August 1. Ground checks and aerial observations failed to locate the source of the moth flight |
| <i>Meroptera praveilla</i> Grt.                                | tA      | Found feeding folds vacated by <i>Phyllocolpa</i> sp. in Twp. 22 Range 18  |
| <i>Messa populifoliella</i> Town.                              | bPo     | Light infestation recorded in Chapleau Twp.  |
| <i>Nematus populi</i> Marl.                                    | tA      | Light defoliation on aspen in Gallagher Twp.   |
| <i>Neodiprion abietis</i> complex                              | bF      | Light infestation in balsam-fir plot in Borden Twp.  |
| <i>Neodiprion</i> sp.<br>(possible <i>N. Abbotti</i> (Leach) ) | jP      | Low numbers recorded in Ivanhoe Twp. and Twp. 28   |
| <i>Neodiprion swainei</i> Midd.                                | jP      | Light infestation in Durban Twp.   |
| <i>Nepytia canosaria</i> Wlk.                                  | bF      | Low numbers observed in beating tray samples in Borden Twp.  |
| <i>Nycteola cinereana</i> N. and D.                            | bPo     | Light infestations recorded on roadside balsam poplar regeneration in Rennie Twp. and Twp. 22 Rge. 17  |

TABLE 14 (continued)

| Insect                                | Host(s)         | Remarks  |
|---------------------------------------|-----------------|--|
| <i>Nymphalis antiopa</i> L.           | wB              | Light infestations recorded on ornamental trees in the town of Chapleau  |
| <i>Pandemis canadana</i> Kft.         | bPo             | Light defoliation in Chapleau Twp.   |
| <i>Petrova albicapitana</i> Busck.    | jP              | Highest numbers occurred in Chapleau Twp. where a total of sixteen pitch masses was recorded on twenty trees                           |
| <i>Phlyctaenia sambucalis</i> Schiff. | Elder-<br>berry | Light defoliation in Ivy Twp.  |
| <i>Phyllocolpa</i> sp.                | bPo, tA         | Generally low population levels recorded with moderate infestations recorded in Ivanhoe Twp. and Twp. 22 Rge. 18                       |
| <i>Pissodes strobi</i> Peck           | jP, wP          | Heaviest weevilling occurred near Flame Lake in Twp. 8D (18%). Other infestations were recorded in Durban Twp. (8%) and Twp. 29 (15%). |
| <i>Pseudexentera oregonana</i> Wlshn. | tA              | Light infestation (14%) in Chapleau Twp.   |
| <i>Pyrrhia exprimens</i> Wlk.         | bPo             | Low numbers collected in Twp. 22 Rge. 17. Adults obtained in black light trap in Panet Twp. from Aug. 19 to Aug. 25                    |
| <i>Rheumaptera subhastata</i> Nolck.  | Sweet-<br>gale  | Light infestation in Ivanhoe Twp.  |
| <i>Sternochetus lapathi</i> Linn.     | W               | Large weevil found commonly on lakeshore shrubs in Ivanhoe Twp.  |
| <i>Trichiosoma triangulum</i> Kby.    | wB              | Light infestation on ornamental trees in the town of Chapleau  |

TABLE 14 (concluded)

| Insect                        | Host(s)                 | Remarks   |
|-------------------------------|-------------------------|---|
| Trichotaphe levisella Fyles   | Aster                   | Light infestation in burned-over area in Twp. 32  |
| Zaraea americana Cress.       | Bush<br>honey<br>suckle | Heavy defoliation to ornamental trees on Pine street in the town of Chapleau  |
| Zeiraphera improbana (Walker) | tL                      | Caused more damage to larch in Chapleau Twp. than <u>C. laricella</u> with a population of 19.7 larvae per 18 inch branch tip |