



**TORONTO  
ENTOMOLOGISTS' ASSOCIATION**

**Contribution To The Knowledge  
Of Hyalophora Columbia**

**1970 SEASONAL SUMMARY**

A CONTRIBUTION TO THE KNOWLEDGE  
OF  
HYALOPHORA (HYALOPHORA) COLUMBIA  
(LEP. : SATURNIIDAE)

Toronto Entomologists' Association  
Occasional Publications No. 2  
Printed as M.S.

1970



A contribution to the knowledge of Hyalophora (Hyalophora)  
columbia (Lep. : Saturniidae)

Newly increased interest in Michigan and Ontario in Hyalophora (H.) columbia (Smith) which was recently re-confirmed in its old habitat in Michigan and rediscovered in the Muskoka and Parry Sound Districts of Ontario, made us consider the reprint of the following paper from "The Biological Review of Ontario", vol. 1/4, 1894, pp. 103-107, one of the very rare remaining copies of which is kept in the Library of the Royal Ontario Museum, Toronto.

This paper is also interesting because of its involuntary contribution to the history of early collections, type specimens and scientific societies.

From the context it has to be deduced that this paper contains the original description of "Platysamia columbia nokomis Brodie" and "Platysamia columbia winonah Brodie". Both are now considered to be a subspecies and a form resp. of the western Hyalophora (H.) gloveri (Strecker). Schüssler in vol. 55 of the "Lepidopterorum Catalogus" has them both still listed under columbia.

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REPRINT from

"The Biological Review"

vol. I, OCTOBER 1894, pp. 103-107

PLATYSAMIA COLUMBIA NOKOMIS

by Wm. Brodie

In the summer of 1863 I found a bombycid cocoon firmly attached to a twig of a double spruce Abies nigra growing in the Township of Whitchurch, York County. It was the first of the kind I had ever seen, and, although it was very different from the usual Cecropia cocoon, I thought it might have been made by a starved and diminutive Cecropia larva, but as the imago had emerged it was not possible to determine.

In Vol. III., p. 201, of Canadian Entomologist, December, 1871, the late G.J. Bowles gave an account of the collecting of larvae of P. columbia by himself and the late Mr. Cowper in the Province of Quebec. He also gives an engraving and Prof. Smith's descriptions of the imago Columbia and of the cocoon, which was originally published in the proceedings of the Boston Society of Natural History, March, 1865, but which I had not seen until it was reproduced in the Canadian Entomologist. From Prof. Smith's description I was pretty sure the cocoon I found on the double spruce was the cocoon of P. columbia. Provancher in Vol. IV. of the Naturaliste Canadien, September, 1872, gives a print of Bowle's lithograph of S. columbia and some general matter, but adds nothing new.

In the Canadian Entomologist, Vol. X., March, 1878, there is a very good coloured lithograph of the larva of P. columbia by the late G.J. Bowles and a short paper by the late F.B. Caulfield giving a description of the larvae. There is also on page 43 an article by C.H. Fernald, in which he gives several food plants, a description of the egg, of the larvae in the several stages of development, and some valuable general information. Up to this time very little had been published as to the geographical range of the species. From 1875-1880 I received several parcels of P. columbia cocoons from Muskoka, collected near Bracebridge by Capt. James Brodie and Mr. R. Mosey, and I was told they were found on the "wild cherry", (Prunus virginiana ?) the dry twigs seemed to me. Many of these were destroyed by parasites. The perfect imagoes which emerged were of the dull-coloured southern type, corresponding very well to Smith's description. I used every possible endeavour to get them paired, but failed. The females ovoposited freely, but, of course, the ova were infertile.

In the spring of 1882 I received a parcel of columbia cocoons collected by W.G.A. Brodie near Carberry, Manitoba. They were attached to twigs of the Elaeagnus argentea, and I was informed the larvae must have fed on the leaves of this shrub. When the imagoes emerged they differed so much from Muskoka specimens that I fancied there must be a specific difference, and so I sent specimens of the moth and of the cocoons to the late H. Edwards. He did not know E. argentea as a food plant of P. columbia. He remarked the difference of the northern form sent by me and the usual southern form, and thought, if permanent, it was at least sub-specific; and he suggested that it should be described and named.

Early in 1883 I received a package of cocoons of P. columbia and of T. polyphemus, collected by W.G.A. Brodie near Pelly, N.W.T. Only one imago emerged from this lot, from a P. columbia cocoon, and it differed so very much from the Manitoba form that I considered it a well-marked variety, being much less in size and of much brighter colours, and the boundaries of the colours much more distinct. All these facts and descriptions of the two forms were embodied in a paper which I read before a meeting of the Natural History Society of Toronto, and I also submitted type specimens of the two forms. For the Carberry form I proposed the name P. columbia nokomis, and for the Pelly form P. columbia winonah. I presented the types, with specimens of the food plant E. argentea, to the museum of the society, all of which, I understand, have been lost. The paper also became the property of the society, but was not considered of sufficient importance for publication, although the proposed names appeared on the list of Canadian insects published by the Society. In the following year I got six cocoons from Mr. Miller Christy, collected between Carberry and Brandon; the imagoes which emerged were of the pure columbia nokomis type.

In the fall of 1885 I received from Mr. H. Leigh a lot of columbia cocoons, collected somewhere near Birtle, Manitoba, from twigs of the "Wolf Willow", one of the common names given to E. argentea, but sometimes given also to Shepherdia argentea. Several imagoes emerged, and they were all of the nokomis type.

In the spring of 1886 I received a small box by mail containing three specimens of this moth collected by W.A. Ducker, D.L.S., near Pilot Mound, Southern Manitoba. There were two females and one male; one of the females had been put in the box alive, and had ovapositioned, but so slow had been the transit that the larvae had emerged from the ova, and had died of starvation before reaching me. Although very much rubbed they were evidently of the nokomis type.

In March, 1887, I received a parcel of galls and cocoons collected from twigs of the "Wolf Willow" by W.D. Ducker. D.L.S., in the Souris district, and at a point near Moosomin on the line of the C.P.R. These cocoons also gave imagoes of the nokomis type.

Early in 1894, I received from Mr. E. Heath, of the Hermitage, Cartwright, Man., a package of cocoons of the usual nokomis type, and was informed by that gentleman that the species was not uncommon in his section, and that the larvae feed on the leaves of E. argentea. No imagoes emerged from this lot; they were all destroyed by parasites.

It would appear, then, from these records that the nokomis type is generally distributed over the Province of Manitoba, and that the common food plant is Eleagnus argentea, and that probably Shepherdia argentea (Wolf Willow ?) may also be a food plant. I do not know the northern nor the western limit of E. argentea, but Mr. Jas. M. Milne, who was on the Government survey, has informed me that he found the shrub on the eighth base line, which lies to the north of the South Saskatchewan, and as far west as the cactus hills, and there can be little doubt that the range of P. columbia nokomis is coterminous with the range of this food plant E. argentea.

The food plants of the southern form (P. columbia) in Ontario, Quebec and in the State of Maine, so far fairly well identified, are Prunus virginiana, Prunus pennsylvanica, Nemopanthes canadensis, Kalmia angustifolia, Rhodora canadensis, Salix sp., Abies nigra, Larix americana. None of these are allied botanically to E. argentea, but I think it most likely that the larvae would take very kindly to the leaves of our common Shepherdia canadensis.

On comparing a series of specimens of columbia with columbia nokomis -- the Manitoba form -- the difference is very obvious in the brighter colours and more sharply defined colour areas. This difference may be in some measure from a difference of food, or from the much longer duration of daylight while the larvae are feeding, or perhaps in part from the lower temperature in winter. And perhaps it may be shown that the north and north-west territories are the normal habitat and nokomis the normal form of the species, differentiated ages ago from cecropia by climatical and other conditions, and that the now southern form is from degenerate stragglers from the north.

The following points of difference may be noted between the columbia nokomis form and the columbia form, as represented by Ontario specimens, and as compared with Smith's description of columbia parts of which are given in brackets. The standard of colour is Ridgway's Nomenclature of Colours.

Antennae, central shaft, bright reddish brown; pectinations, darker (black); palpi, light liver brown (dark maroon brown); dorsum of thorax, bright reddish liver brown, with a posterior pure white band (dark maroon with a short grey band); under side of thorax, reddish liver brown (black); legs, reddish brown, pile darker (black, slightly tinged with brownish); abdomen, with alternate annulations, bright liver brown and pure white (black and dirty white).

Primaries, above, with a rather sharply elbowed pure white line (greyish white); the middle area of the wing is bright reddish liver brown (dark brown), and contains a central ovate white spot (triangular); this bright coloured area is separated from the costa by a moderately wide longitudinal greyish stripe.

Secondaries, with a large white spot at the shoulder (small, dirty white); the central area, bright reddish liver brown (dark brown), having a central white spot, which varies from kidney form to curved pear form, and varying much in size, but always larger than the corresponding spot on the primaries; but no sexual difference could be observed, either in the size or in the form, of these central white spots.

The primaries beneath have the space from the shoulder to the median white cross band of a maroon brown (black), and generally the under side of the wings of columbia nokomis is brighter coloured than that of columbia.

As I have not seen but one specimen of the columbia winonah type, little need be said about it. My specimen may have been representative of an extreme northern group, or it may have been only a strongly marked specimen of columbia nokomis.



ANNUAL SUMMARY OF THE PAPILIONOIDEA AND HESPERIOIDEA

ENCOUNTERED IN ONTARIO FOR 1970

Compiled by P.M. Catling (Nymphalidae, Libytheidae)  
W. Edmonds (Lycaenidae)  
C.H. Walker (Papilionidae, Pieridae,  
Hesperioidea)

Perhaps the most obvious phenomenon in butterfly populations during 1970 was the abundance of Danaus plexippus and Vanessa virginiensis, both of which were uncommon in 1969. Vanessa cardui reported by nine of the contributors was not reported at all in 1969. "Throughout July and the beginning of August, the most abundant species in Algonquin Park (Hwy. 60) were Speyeria atlantis, Speyeria aphrodite, Speyeria cybele, Vanessa virginiensis and Colias interior". (D.S.)

The typically more southern butterflies were taken again in Essex County, including Asterocampa celtis, Asterocampa clyton and Libythea bachmanii. Callophrys (Incisalia) henrici was reported from Frontenac Co. and Leeds Co. In the north, the capture of Satyrium liparops fletcheri (subsp. with orange marking on the forewing) at Capreol, extended the known range to north-eastern Ontario (previously known in the north-west). Species reported here, but not in the 1969 Summary are:- Eurema lisa, Oeneis macounii, Speyeria atlantis, Boloria eunomia, Boloria titania, Vanessa cardui, Polygonia satyrus, Satyrium liparops fletcheri, Strymon melinus, Plebeius argyrognomon and Callophrys (Incisalia) henrici.

As with most of nature, the butterflies in Ontario are faced with an increasingly pessimistic future. Two species have already suffered drastically due to man's activity. Chlosyne gorgone, once frequenting the sand plains west of Toronto, is now extinct in our province. At least two of the four known colonies of Pieris virginiensis have been eliminated (that leaves one or two!). If the unique habitats within Pinery Provincial Park continue to be misused, and over used, we may expect a few more provincial extinctions. "Extensive defoliant spraying for hundreds of miles west of Hearst ruined most of the wild flower patches". (G.E.)

This year's summary is larger than that of last year, based on more complete recapitulation from 25 contributors. Although all information submitted cannot be used, - it is all kept and filed according to species. In this form it is available to any member of the T.E.A., and may be used later on for distribution maps, graphs of flight period, etc.

The contributors are indebted to R.R. Michaels for much help and support. We thank J.C.E. Riotte, Royal Ontario Museum, for checking our summary for scientific accuracy.

HESPERIIDAE

Pyrginae

Epargyreus clarus (Cramer)

Chaffeys Locks, Leeds Co., June 10 (P.W.); Toronto, July 8 (S.M.D.); Dundas Marsh, July 10 (B.R.O.); Toronto, July 15 (B.R.O.); Toronto (Scarborough), July 20 (C.H.W.).

Thorybes pylades (Scudder)

Gravenhurst, June 14 (B.R.O.); Chapleau, June 29 (S.M.D.); Chaffeys Locks, Leeds Co., June 30 (4 ♀♀), July 3 (P.W.); Dundas Marsh, July 10 (B.R.O.); Dundas, July 11 (S.M.D.).

Pyrgus centaureae freija (Warren)

Cochrane, June 6 (J.W.); 20 mi. E. of Hearst, June 14 (W.J.D.E.)

Pholisora catullus (Fabricius)

St. Williams, Norfolk Co., May 22 (S.M.D.), June 2 (B.R.O.).

Erynnis brizo (Boisduval & LeConte)

St. Williams, Norfolk Co., May 9 (S.M.D.); Pinery Prov. Park, Lambton Co., May 15 (B.R.O.), May 18 (S.M.D.); St. Williams, Norfolk Co., June 2 (B.R.O.).

Erynnis icelus (Scudder & Burgess)

St. Williams, Norfolk Co., May 9, 22 (S.M.D.), June 2 (B.R.O.); Kilworthy, Muskoka Dist., May 10 (J.W.); Chaffeys Locks, Leeds Co., May 30 (1) (P.W.); Moosonee, June 13 (S.M.D.); Perth Rd., Frontenac Co., June 22 (1) (P.W.); Chapleau, June 29 (S.M.D.); Dyer Bay, Bruce Co., July 14 (S.M.D.).

Erynnis juvenalis (Fabricius)

St. Williams, Norfolk Co., May 9, 22 (S.M.D.), June 2, July 21 (B.R.O.); Pinery Prov. Park, Lambton Co., May 18 (S.M.D.)(B.R.O.); Kilworthy, Muskoka Co., May 10 (J.W.); Kent Bridge, Kent Co., May 18 (J.W.); Chaffeys Locks, Leeds Co., May 20 (P.W.); Huntsville, Muskoka Dist., May 30 (B.R.O.); Perth Rd, Frontenac Co., May & June (common) (P.W.)

Erynnis lucilius (Scudder & Burgess)

Perth Rd., Frontenac Co., May to June, double-brooded (P.W.); Chaffeys Locks, Leeds Co., May to July, double-brooded (P.W.); Pinery Prov. Park, Lambton Co., May 18 (S.M.D.); St. Williams, Norfolk Co., May 9, 22 (S.M.D.), July 21 (B.R.O.); Kent Bridge, Kent Co., May 18, Aug. 3 (J.W.); Kaladar, Lennox & Addington Co., July 17 (1) (P.W.); Braeside, Renfrew Co., July 22 (1) (P.W.).

Erynnis martialis (Scudder)

St. Williams, Norfolk Co., May 9 (S.M.D.), June 25 (J.W.).

Hesperiinae

Carterocephalus palaemon mesapano (Scudder)

Turner Tract, Halton Co. Forest, June 1 (A.B.); Cochrane, June 13 (S.M.D.), June 14 (W.J.D.E.); Geraldton, June 15, 16, 17 (common)(W.J.D.E.); Perth Rd., Renfrew Co., June (common in grassy locations) (P.W.); Gravenhurst, Muskoka Dist., July 14 (B.R.O.).

Thymelicus lineola (Ochsenheimer)

Introduced over 60 years ago, this Skipper was reported as very common to over abundant from the Hamilton area, east through Toronto and on to Chaffeys Locks during June & July by our members W.J.D.E., B.R.O., P.D.S., C.H.W., P.W.

Ancyloxiphia numitor (Fabricius)

St. Williams, Norfolk Co., June 2 (B.R.O.); Chaffeys Locks, Leeds Co., June 10 (P.W.); Gravenhurst, Muskoka Dist., June 14 (B.R.O.); Perth Rd., Renfrew Co., June 15 (P.W.); Toronto (Scarborough), common on weedy banks of Massey Creek, June 10 - 30 (C.H.W.); Cochrane, July 3 - 5 (B.R.O.); Dundas Marsh, Wentworth Co., July 10 (B.R.O.); Algonquin Park, July 22 (B.R.O.); Dundas, July 11 (S.M.D.); Thamesville, Kent Co., Aug. 3 (A.B.); Point Pelee, Aug. 3 (S.M.D.).

Amblyscirtes vialis (Edwards)

Pinery Prov. Park, Lambton Co., May 18 (B.R.O.); Perth Rd., Frontenac Co., May 30 (1) (P.W.); 20 miles E. of Hearst, June 14 (W.J.D.E.); Geraldton, June 15, 16, 17 (common)(W.J.D.E.); Chapleau, June 28 (S.M.D.); Klotz Lake, July 1 (S.M.D.); Matheson, July 2 (S.M.D.).

Atrytone delaware (Edwards)

Dundas, Wentworth Co., July 10 (B.R.O.), July 11 (S.M.D.); Rondeau Prov. Park, Kent Co., July 13 (J.W.); Pinery Prov. Park, Lambton Co., July 15 (J.W.); St. Williams, Norfolk Co., July 18 (S.M.D.); Glen Morris, July 18 (S.M.D.).

Euphyes bimacula (Grete & Robinson)

Toronto (Willowdale), July 5 (J.W.).

Euphyes dion (Edwards)

Toronto (Willowdale), July 5 (J.W.); Dundas, Wentworth Co., July 10 (B.R.O.), July 11 (S.M.D.).

Euphyes vestris metacomet (Harris)

Colberne, Northumberland Co., July 9, 15 (W.J.D.E.); Toronto (York Univ. grounds), July 13 (S.M.D.); Toronto (Scarborough) common in grassy meadows on edge of Massey Creek, July 15 - 25 (C.H.W.); Paris Bog, Brant Co., July 18 (B.R.O.); Perth Rd. & Chaffeys Locks during July (P.W.); Thamesville, Kent Co., Aug. 3 (A.B.).

Poanes hobomok (Harris)

Shannonville, Hastings Co., May 31 (B.R.O.); St. Williams, Norfolk Co., June 2 (B.R.O.); Gravenhurst (♀ f. pocahontas), June 14 (B.R.O.); Norval, Peel Co., June 7 (R.W.C.); St. Williams, June 6 (A.B.); Washago, Ontario Co., June 13 (W.J.D.E.); 30 miles W. of Hearst, June 14 (W.J.D.E.); Perth Rd., Frontenac Co., common in June, June 15 (2 ♀♀ pocahontas) (P.W.); Chaffeys Locks, Leeds Co., common in June, June 30 (1 ♀ pocahontas); Port Sydney, Muskoka Dist., June 27, 28, common on open paths through woodland (C.H.W.).

Poanes massasoit (Scudder)

Rondeau Prov. Park, Kent Co., July 17 (J.W.); Paris Bog, Brant Co., July 18 (B.R.O.).

Poanes viator (Edwards)

Dundas Marsh, Wentworth Co., July 10 (B.R.O.), July 11 (S.M.D.); Paris Bog, Brant Co., July 18 (B.R.O.); Glen Morris, July 18 (S.M.D.); Chaffeys Locks, Leeds Co., July 13 (3), July 18 (2) (P.W.); Perth Rd., Frontenac Co., July 25 (5) (P.W.). Both of these last two colonies in grassy marshes (P.W.).

Pompeius verna (Edwards)

Toronto (Willowdale), July 5 (J.W.); Toronto (York Univ.), July 15 (B.R.O.); Paris Bog, Brant Co., July 18 (B.R.O.); Toronto (York Univ.), July 11 (S.M.D.).

Hesperia leonardus Harris

Perth Rd., Frontenac Co., Aug. 20 (1 ) (P.W.); Chaffeys Locks Leeds Co., Aug. & Sept. (P.W.); Kent Bridge, Kent Co., Aug. 29, Sept. 7 (J.W.).

Hesperia sassacus sassacus Harris

Perth Rd., Frontenac Co., common in June in open roadsides, fields & open woodland (P.W.); Gravenhurst, Muskoka Dist., June 14 (B.R.O.); Port Sydney, Muskoka Dist., June 27 (2) (C.H.W.).

Polites coras (Cramer)

This species was reported as quite common from Thamesville & St. Williams east to Chaffeys Locks & north to the Huntsville area in late June through July by P.D.S., A.B., B.R.O., P.W., S.M.D. & C.H.W.

Polites mystic (Scudder)

Perth Rd. & Chaffeys Locks, common in June & July (P.W.);  
Port Sydney, Muskoka Dist., June 28, common in open meadows  
(C.H.W.); Cochrane, July 3 - 5 (B.R.O.); Algonquin Park,  
July 22 (B.R.O.); Fenelon Falls, June 27 (S.M.D.);  
Pefferlaw, June 28 (S.M.D.); Chapleau, June 30 (S.M.D.);  
Klotz Lake, July 1 (S.M.D.); Matheson, July 2 (S.M.D.);  
St. Williams, July 18 (S.M.D.).

Polites origines (Fabricius)

Chaffeys Locks, Leeds Co., July 13 (1 ) (P.W.); St. Williams,  
Norfolk Co., July 18 (S.M.D.).

Polites themistocles (Latreille)

Shannonville, Hastings Co., May 31 (B.R.O.); Perth Rd. &  
Chaffeys Locks, June & July & Sept. (P.W.); Thornhill,  
July 21 (C.H.W.); North Woolwich, Waterloo Co., July 23 (P.D.S.);  
Inverhuron Prov. Park, Bruce Co., July 25 (P.D.S.).

Wallengrenia otho egeremet (Scudder)

Pefferlaw, York Co., June 28 (S.M.D.); Toronto, July 8, 13  
(S.M.D.); Dundas Marsh, Wentworth Co., July 10 (B.R.O.);  
Dundas, Wentworth Co., July 11 (S.M.D.); Toronto (York Univ.  
grounds), July 15 (B.R.O.); Glen Morris, July 18 (S.M.D.);  
St. Williams, Norfolk Co., July 18 (S.M.D.); Perth Rd. &  
Chaffeys Locks, July 21 - 23 (P.W.); Speyside, July 24 (S.M.D.).

PAPILIONIDAE

Papilioninae

Papilio cressphontes Cramer

Point Pelee Nat. Park, Essex Co., Aug. 3 (B.R.O.)(S.M.D.)

Papilio glaucus glaucus Linnaeus

St. Williams, Norfolk Co., May 22 (S.M.D.), June 6 (R.R.M.),  
also sighted in other places near the north shore of Lake Erie.

Papilio glaucus canadensis Rothschild & Jordan

Beginning north of Toronto, common throughout the districts of  
Muskoka, Nipissing, Algoma and further north.

Papilio polyxenes asterius Stoll

Taken & noted as common this year by most of our members at  
all collecting points in the Province. Earliest date, Halton Co.  
Forest, May 9 (P.M.C.); last date, Toronto, Oct. 23 (R.R.M. &  
J.C.E.R.)

Papilio troilus Linnaeus

Stevensville, Welland Co., July 17 (G.P.B.); St. Williams, Norfolk Co., July 18 (S.M.D.), July 21 (B.R.O.); larvae not rare Aug. 22 - Sept. 20 (W.P. Jr.); Grand Bend, Lambton Co., not uncommon (Q.H.); Thamesville, Kent Co., Aug. 3 (1) (A.B.); Pt. Pelee Nat. Park, Aug. 3 (S.M.D.)(B.R.O.)

PIERIDAE

Coliadinae

Colias eurytheme Boisduval

Noted in abundance throughout the Province by all our members, except Q.H. who found it below average in numbers in Huron Co. First taken at St. Williams, Norfolk Co., June 2 (B.R.O.). Last capture, Toronto, Oct. 25 (S.M.D.).

Colias interior Scudder

Pefferlaw, York Co., June 28 (S.M.D.); Chapleau, June 29 (S.M.D.); Manitouwadge, Thunder Bay Dist., June 30 (S.M.D.); Klotz Lake, Thunder Bay Dist., June 30 (S.M.D.); Algonquin Prov. Park, July 22 (B.R.O.); Q.H. found it to be quite uncommon in Muskoka Dist. about at the same numbers level as in 1969. On Highway 17, 44 miles W. of Hearst, Cochrane Dist., Aug. 21 (G.E.)

Colias philodice Godart

This species was taken by all our reporters at all points in the Province, with no comments as to abundance, except from Q.H., who found in his experience a very severe reduction in numbers. First noted at St. Williams, Norfolk Co., May 9 (S.M.D.). Last date, Toronto, October 25 (S.M.D.)

Eurema lisa Boisduval & LeConte

This vagrant species was noted this year again in the Province, after a complete lapse last year. Chaffeys Locks, Leeds Co., June 30 (P.W.); Perth Rd., Frontenac Co., July 26 (P.W.).

Euchloeinae

Euchloe olympia rosa (Edwards)

Pinery Prov. Park, Lambton Co., May 17 (B.R.O.), May 18 (S.M.D.)

Pierinae

Pieris oleracea Harris

Perth Rd., Frontenac Co., late May & early June, double-brooded, July 15 (3) (P.W.). P.W. found it in same regions as P. rapae, but in a distinctly different habitat. (i.e. shaded roadsides). Seen together with P. rapae in only one location: around lilac blossoms at edge of woods bordering on a field. Lake Opinicon, Frontenac Co., May 20 (P.W.).

Near Haliburton, (3) May 18 (Q.H.); Killaloe Sta., Renfrew Co., May 28 (P.D.S.)

Meosonee, Cochrane Dist., June 10 (S.M.D.); Cochrane, June 13 (S.M.D.); Manitouwadge, Thunder Bay Dist., June 30 (S.M.D.). All of the "Spring Form".

Pieris protodice Boisduval & LeConte

St. Williams, Norfolk Co., June 6, Aug. 8, 22, 29, Sept. 5 (R.R.M.) June 6, July 14, Sept. 20 (W.P. Jr.); Minaki, Kenora Dist., July 27 (W.E.); Q.H. found it at St. Williams and also Long Point, Norfolk Co.; Waterford, Norfolk Co., Aug. 3 (W.P. Jr.).

Pieris rapae (Linnaeus)

All of our reporters found it all too abundant throughout the Province at all times of the year, from April (S.M.D.) to the last sighting on Nov. 4 in Toronto (C.H.W.).

Pieris virginiensis Edwards

This species appears to still be abundant in it's only known Provincial station - The Halton Co. Forest. Our members noted it from April 25 (S.M.D.) to May 10 (P.D.S.). W.P. Jr. found 14 eggs on *Dentaria* sp. on May 10, while P.M.C. has been marking and releasing specimens for an area survey project, details of which will be published at a later date.

NYMPHALIDAE

Danainae

Danaus plexippus (Linnaeus)

Abundant throughout southern Ontario, north to Cochrane, July 3 - 5 (B.R.O.); Minaki, Kenora Dist., July 27 (W.E.), and Chapleau, June 30 (S.M.D.). Early dates included: Toronto, May 30 (S.M.D.) and Georgetown, June 7 (R.R.M.). This migratory species had reached Muskoka (Gravenhurst) by June 12 (R.R.M.), and Thunder Bay (Cavell) by June 16 (W.J.D.E.). Southward migration began during the second and third weeks of September, flying south near Colborne (W.J.D.E.). About 100 seen flying south over the Q.E.W. between Toronto and Hamilton, September 12 (P.M.C.). Very abundant on Toronto Island, Oct. 24 (P.M.C.). Some were still to be seen around Toronto until early November.

Satyrinae

Lethe eurydice (Johansson)

Early dates: Georgetown, June 7 (R.R.M.) and Greenwood, Ontario Co., June 14 (P.M.C.). Main flight period during late June and July. Last encountered, Point Pelee, August 3 (B.R.O.) (S.M.D.) and Thamesville (A.B.) and St. Williams, August 18 (A.M.). This species is a local inhabitant of marshlands (often with L. thoe and A. bimacula) and was reported from many

localities in southern Ontario during the main flight period. The northernmost report this season was from Capreol, Sudbury Dist., June 16 and 17 (W.E.).

Lethe portlandia (Fabricius)

Campbellville - caterpillar, May 30 (W.P.); Elora Gorge Park, June 23 (A.M.); Greenwood, June 28 (P.M.C.); Georgetown, June 29 (M.S.); Chaffeys Locks, July 4 (R.R.M.); Colborne, July 6 (W.J.D.E.); Hwy 60, 3 mi. east Algonquin Park, July 8 (A.M.); Minden, July 6, 8, 10 (N.T.); Dorset, July 8 (N.T.); Mt. Irwin, Crystal Lake, July 10 - 24 (W.P.); Sault Ste. Marie, July 12, 30 (B.A.); North Woolwich, July 15 (P.D.S.); Glen Morris, July 18 (S.M.D.); Pinery Prov. Park, Riverside Rd., July 18 (A.B.); Campbellville, July 26, Aug. 1 (R.R.M.), Leaskdale, Aug. 2 (P.M.C.). Common at Perth Rd., Frontenac Co., ca. 100 caught in bait trap (P.W.).

Euptychia cymela (Cramer)

Apparently a common and widespread woodland species in Ontario. An unusually early record was Campbellville, May 3 (C.H.W.). Many reports during the main flight period in June and early July. The latest was St. Williams, July 21 (B.R.O.). Reported from the following districts and counties: Algoma, Frontenac, Muskoka, Norfolk, Northumberland, Ontario, Sudbury, Waterloo, Welland, Wellington, Wentworth and York.

Coenonympha tullia inornata Edwards

Many reports indicate that this species is on the wing in June and then again in August and September, "unquestionably a double breeder in Northumberland Co." (W.J.D.E.). Shannonville, May 30 (S.M.D.); Cochrane, July 5 (B.R.O.); no reports July 6 to Aug. 8 incl.; Clairville, Aug. 9 (A.B.); numerous records in late August; seen - Chaffeys Locks, Sept. 20 (P.W.). Reported from the following counties and districts: Algoma, Cochrane, Hastings, Leeds, Muskoka, Nipissing, Northumberland, Ontario, Parry Sound, Peel, Simcoe and Sudbury.

Cercyonis pegala nephele (Kirby)

Gravenhurst, June 14 (B.R.O.) main flight period in July - latest report - 8 miles west of Kakabeka Falls, Aug. 20 (G.E.). Apparently common and widespread, preferred habitat appears to be "shrubby meadows" (P.D.S.). Reported the following counties and districts: Algoma, Brant, Frontenac, Haldimand, Halton, Kenora, Kent, Leeds, Lincoln, Muskoka, Norfolk, Northumberland, Ontario, Simcoe, Sudbury, Waterloo, Welland, Wentworth, Thunder Bay and York.  
c.p.n. transitional to alope was reported from Thamesville, Kent Co., Aug. 3 (A.B.).

Erebia disa mancinus Doubleday

Hwy 583, Geraldton, June 15, 16 (W.J.D.E.)

Erebia discoidalis (Kirby)

Driftwood, June 6 (J.W.).

Oeneis chryxus strigulosa McDunnough

Common in dry grassy openings on Precambrian bedrock, Perth Rd., Frontenac Co., May 8 - 28 (P.W.); one collected near Dorset, May 21 (Q.H.); Huntsville, May 24, 30 (B.R.O.) (S.M.D.); common at Found Lake, Mew Lake Airfield, Source Lake and in the vicinity of East Gate, all Algonquin Park, May 26 - June 5 (D.S.).

Oeneis jutta ascerta Masters & Sorensen

50 mi. south of Chapleau, June 1 (S.M.D.); bog near railroad crossing Hwy 643, Thunder Bay District, June 16 (W.J.D.E.); 30 mi. north of Manitowadge, June 28 (S.M.D.); 10 mi. south of Matheson, July 2 (S.M.D.); Cochrane, July 3 - 5 (B.R.O.).

Oeneis macounii (Edwards)

This species is said to fly on even numbered years in the east, e.g. 1968, 70, 72 etc. West of Geraldton, Hwy 11, June 17 (W.J.D.E.).

Nymphalinae

Argynnini

Speyeria aphrodite (Fabricius) s.l.

Adults in late July and early August. Reported this year from the following Counties and Districts: Algoma, Essex, Frontenac, Halton, Kenora, Leeds, Norfolk, Peterborough, Thunder Bay, Waterloo, Wellington and York.

Speyeria atlantis (Edwards) s.l.

Apparently more abundant in the north. Adults in July and early August. Reported from the following Counties and Districts: Algoma, Kenora, Leeds, Nipissing, Norfolk, Ontario and Thunder Bay.

Speyeria cybele (Fabricius)

Judging by the number of reports, this species is the most abundant Speyeria in southern Ontario. Flight period was from early June to mid-August. Recorded in the following Counties and Districts: Algoma, Brant, Halton, Lambton, Leeds, Norfolk, Northumberland, Ontario, Peel, Simcoe, Sudbury, Waterloo, Welland and Wentworth.

Boloria eunomia dawsoni (Barnes & McDunnough)

50 mi. south of Chapleau, June 28 (S.M.D.); 30 mi. north of Manitouwadge, June 29 (S.M.D.); 10 mi. south of Matheson, July 2 (S.M.D.); Cochrane, July 3 - 5 (B.R.O.).

Boloria freija (Thunberg)

Cochrane, June 6 (J.W.); near Geraldton, June 15, 16 and 17 (W.J.D.E.)

Boloria frigga (Thunberg) s.l.

Fraserdale, June 13 (S.M.D.) most Eastern record.

Boloria selene atrocotalis (Huard)

Earliest report from Ayr, Waterloo Co. on June 7 (A.M.); latest from Colborne, Aug. 26 (W.J.D.E.). Reported from the following Counties and Districts: Algoma, Cochrane, Muskoka, Nipissing, Norfolk, Northumberland, Ontario, Parry Sound, Thunder Bay and Waterloo.

Boloria titania grandis (Barnes & McDunnough)

Longlac, Thunder Bay District, July 23 (W.E.).

Boloria toddi (Holland) s.l.

Earliest report from Campbellville on May 9 (P.M.C.). Many records in May, June and July. Latest from St. Williams, August 18 (A.M.). Reported from the following Counties and Districts: Cochrane, Halton, Lambton, Leeds, Nipissing, Norfolk, Northumberland, Ontario, Peel, Renfrew, Simcoe, Thunder Bay and Wentworth. Common as usual when it occurs (usually undisturbed meadowland) (W.J.D.E.) (Q.H.) (P.M.C.).

Melitaeini

Euphydrias phaeton (Drury) s.l.

Chaffeys Locks, Leeds Co., June 10 (P.W.); Wye Marsh, Midland, Simcoe Co., June 27 - July 15 (R.R.M., J.H.); Sault Ste. Marie, June 28, 30 (B.A.); Bayfield, July (Q.H.); St. Williams, July 18 (S.M.D.); Beverely Swamp, July 18 (B.R.O.).

Chlosyne harrisii Scudder

Port Sydney, June 13 (R.R.M.); Burk's Falls, June 13 (W.J.D.E.); Greenwood, locally common, June 21 (P.M.C.); Perth Rd., Frontenac Co., June 22, July 3 (P.W.); Apsley, June 26 (Q.H.); Chapleau, June 29 (S.M.D.).

Chlosyne nycteis Doubleday

Widespread in Ontario, and flying in late June, July and early August according to reports from ten of the contributors. Reported from the following Counties and Districts: Algoma, Bruce, Lambton, Norfolk, Renfrew, Sudbury, Thunder Bay, Wentworth and York.

Phyciodes batesii (Reakirt)

Abundant in Pinery Prov. Park, Lambton Co., July 11 (P.M.C.) and July 15 (J.W.). This year only reported from this one location.

Phyciodes tharos (Drury)

Abundant and widespread, flying from mid-May to late September, with the majority of records in June and July.

Nymphalini

Nymphalis antiopa (Linnaeus)

Earliest record: Colborne, April 29 (W.J.D.E.); latest: Ajax, Ontario Co., Oct. 18 (P.M.C.). Reported for all months between these dates. The northernmost record was Moosonee, June 10 (S.M.D.).

Nymphalis milberti (Godart)

The earliest report was from Glenburnie, Frontenac Co. on April 14 (P.W.); and the latest was from Huron Co., Sept. 6 (Q.H.). Female ovipositing on nettles, July 5 (W.J.D.E.). Widespread in Ontario north to Kenora, Aug. 19 (G.E.). Reported by twelve of the contributors.

Nymphalis vau-album j-album (Boisduval & LeConte)

One specimen from Clarke Lake near East Gate, July 28 (D.S.); Minaki, Kenora District, July 25, 27 (W.E.); Perth Rd., Frontenac Co., July, seen only (P.W.); Chaffeys Locks, early September, Sept. 20 (1 taken each day) (P.W.). These were the only reports.

Polygonia comma (Harris)

Campbellville, April 25 (S.M.D.); Perth Rd., Frontenac Co., July 3 (P.W.); Cochrane, July 5 (B.R.O.); visiting milkweed, Kaladar, Lennox and Addington Co., July 17 (P.W.); Point Pelee, Aug. 3 (S.M.D.).

Polygonia faunus (Edwards)

Hwy 801, near Jellicoe, Thunder Bay District, June 17 (W.J.D.E.).

Polygonia interrogationis (Fabricius)

Obviously the most abundant member of the genus, recorded by ten of the contributors. Earliest report was: Toronto, May 29 (G.P.B.); and the latest: at sugared tree, East Toronto, Nov. 4 (C.H.W.). Collected also in June, July, August and September from Essex, Frontenac, Halton, Norfolk, Northumberland, Peterborough, Waterloo, Wellington, Wentworth and York Cos.

Polygonia progne (Cramer)

Campbellville, April 25 (S.M.D.); Perth Rd., Frontenac Co., April 29 (P.W.); Chaffeys Locks, Leeds Co., June 10 and July 13 (P.W.); Moosonee, June 12 (S.M.D.); Cochrane, June 13 (S.M.D.); 20 miles north of Geraldton, and Hwy 643 near Covell, June 15 (W.J.D.E.); Wye Valley Marsh, near Midland, July 2 (J.H.); Perth Rd., Frontenac Co., July 3 (P.W.); Dyer Bay, Bruce Co., July 4 (S.M.D.); Kaladar, Lennox & Addington Co., July 17 (P.W.).

Polygonia satyrus neomarsyas dos Passos

Moosonee, June 12 (S.M.D.).

Vanessa atalanta (Linnaeus)

Apparently quite common in the southern portions of Ontario north to Minaki, Kenora District, July 25, 27 (W.E.). Earliest reports were: Colborne, May 1 (W.J.D.E.), Toronto, May 3 (S.M.D.) and Georgetown, May 3 (R.R.M.). Reported by 14 of the contributors.

Vanessa cardui (Linnaeus)

Reported by nine of the contributors throughout Ontario north to Moosonee, for the months of June, July, August, September and October.

Vanessa virginiensis (Drury)

"Common in Colborne area and everywhere else that I travelled in Ontario throughout the summer" (W.J.D.E.). Quite so, - reported by 18 of the contributors throughout the southern portions of Ontario north to Kenora District. First encountered on May 3 at Toronto (S.M.D.), Georgetown (R.R.M.), and Forks of Credit, Peel Co. (P.M.C.). Last reported - Toronto, October 25 (S.M.D.).

Junonia coenia (Huebner)

Point Pelee, August 3 (B.R.O., S.M.D.); Presqu'ile Provincial Park, October 7 (W.J.D.E.).

Limenitini

Limenitis archippus (Cramer)

Reported by 15 of the contributors from June 2 [St. Williams, (B.R.O.)] to Aug. 29 [Ajax (N.T.)], throughout southern Ontario north to French River, August 18 (B.R.O.).

Limenitis a. arthemis (Drury)

Earliest record: St. Williams, June 6 (A.B.). The majority of the reports were in June and July with one in August [Sault Ste. Marie, Aug. 25 (B.A.)]. Collected in the following Counties and Districts: Algoma, Bruce, Cochrane, Frontenac,

Halton, Kenora, Leeds, Muskoka, Nipissing, Norfolk,  
Northumberland, Ontario, Peel, Peterborough, Simcoe, Sudbury,  
Welland, Wellington, Wentworth and York.

Limenitis arthemis astyanax (Fabricius)

Earliest record: St. Williams, June 2 (B.R.O.); latest:  
Stevensville, Welland Co., August 4 (G.P.B.). Most of the  
records were in June, from the following Counties and Districts:  
Essex, Halton, Norfolk, Ontario, Waterloo, Welland, Wellington  
and Victoria.

Apaturini

Asterocampa celtis (Boisduval & LeConte)

Point Pelee, August 3 (B.R.O., S.M.D.)

Asterocampa clyton (Boisduval & LeConte)

Point Pelee, August 3 (B.R.O., S.M.D.)

Libytheidae

Libythea bachmanii Kirtland

Point Pelee, August 3 (B.R.O., S.M.D.)

LYCAENIDAE

Lycaeninae

Theclini

Harkenclenus titus (Fabricius)

Dundas Marsh, Wentworth Co., July 10 (B.R.O.); Dundas,  
Wentworth Co., July 11 (over 20 obs., very addicted to flowers)  
(S.M.D.); Mt. Irwin, Crystal Lake, Peterborough Co., July 10 -  
July 24 (W.P. Jr.); Kaladar, Lennox & Addington Co., July 17  
(3) (P.W.); York Univ. Tor., (Bayview & Lawrence) July 15  
(B.R.O.); Pinery Prov. Park, (Riverside Rd.), Lambton Co.,  
July 18 (A.B.); St. Williams, Norfolk Co., July 18 (S.M.D.)  
July 21 (B.R.O.); Speyside, Halton Co., July 24 (S.M.D.);  
Perth Rd., Frontenac Co., July 23 (1) (P.W.); Warsaw Caves,  
Peterborough Co., July 26 (W.J.D.E.); Nr. Grand Bend, June 30  
(common in one small locality), (Q.F.H.); French River,  
Aug. 20 (B.R.O.).

Satyrium acadica (Edwards)

Toronto July 8 (S.M.D.); Dundas Marsh, Wentworth Co., July 10  
(B.R.O.); Dundas, Wentworth Co., July 11 (S.M.D.); Kaladar,  
Lennox & Addington Co., July 17 (1) (P.W.); Paris Bog, Brant  
Co., July 18 (B.R.O.); Toronto Harbour Area, September (several)  
(Q.F.H.).

Satyrium boreale (Lafontaine)

Capreol, Sudbury District, July 16 (W.E.); Perth Rd.,  
Frontenac Co., July (1) (P.W.).

Satyrium calanus (Huebner)

10th Line, Halton Co., (Nr. Streetsville), July 5 (A.B.);  
York Univ. Tor., July 8 (S.M.D.); Dundas Marsh, Wentworth Co.,  
July 10 (B.R.O.); Dundas, Wentworth Co., July 11 (S.M.D.);  
Toronto, July 13 (S.M.D.); York Univ. Tor., (Bayview &  
Lawrence), July 15 (B.R.O.); Capreol, Sudbury Dist., July 16  
(W.E.); Pinery Prov. Park, (Riverside Rd.) Lambton Co.,  
July 18 (A.B.); St. Williams, Norfolk Co., July 18 (S.M.D.),  
July 15 (B.R.O.); Perth Rd., Frontenac Co., July (1) (P.W.).

Satyrium caryaevorum (McDunnough)

Perth Rd., Frontenac Co., June 30 (2) (P.W.); Dundas Marsh,  
Wentworth Co., July 10 (B.R.O.); Lake Opinicon, Frontenac Co.,  
July 13, 1 , 1<sup>+</sup> in copula, about mid-day, along dirt road  
through wooded region, (P.W.); Chaffeys Locks, Leeds Co.,  
July 19 (1<sup>+</sup>) (P.W.).

Satyrium edwardsii (Saunders)

Kaladar, Lennox and Addington Co., July 17 (8), (visiting  
spirea flowers) (P.W.); Pinery Prov. Park, (Cedar Nature  
Trail), Lambton Co., July 18 (A.B.); St. Williams, Norfolk  
Co., July 18 (4 obs.) (S.M.D.), July 21 (B.R.O.); High Falls  
Game Preserve, Peterborough Co., July 26 (W.J.D.E.).

Satyrium liparops (LeConte)

York Univ. Tor., July 8 (S.M.D.); Dundas Marsh, Wentworth Co.,  
July 10 (B.R.O.); Dundas, Wentworth Co., July 11 (S.M.D.);  
Perth Rd., Frontenac Co., July 16 (1), July 23 (1) (P.W.);  
St. Williams, Norfolk Co., July 18 (S.M.D.); Speyside, Halton  
Co., July 24 (S.M.D.).

Satyrium liparops fletcheri (Michener & dos Passos)

Capreol, Sudbury District, July 16, 17 (W.E.).

Callophrys (Incisalia) augustinus (Westwood)

Pefferlaw, York Co., May 2 (S.M.D.), May 9 (B.R.O.); Pinery  
Prov. Park, Lambton Co., May 18 (B.R.O.) (S.M.D.); 10 miles  
north of Geraldton, Thunder Bay Dist., June 15 (W.J.D.E.);  
Cochrane, Cochrane Dist., July 4 (B.R.O.).

Callophrys (Incisalia) eryphon (Boisduval)

10 miles north of Geraldton, Thunder Bay Dist., June 15 (W.J.D.E.).

Callophrys (Incisalia) henrici (Grote & Robinson)

Chaffeys Locks, Leeds Co., May (1) (P.W.); Perth Rd., Frontenac Co., May (about 8 - 10 collected, not uncommon in clearings around Vaccinium) (P.W.).

Callophrys (Incisalia) irus (Godart)

St. Williams, Norfolk Co., May 9 (S.M.D.).

Callophrys (Incisalia) nippon (Huebner)

St. Williams, Norfolk Co., May 9 (S.M.D.), June 2 (B.R.O.), June 3 (A.B.), June 6 (1) (A.B.) (W.P. Sr.); Nr. Castleton, Northumberland Co., May 10 (feeding on blossoms of Antennaria neglecta) (W.J.D.E.); Pinery Prov. Park, Lambton Co., May 18 (B.R.O.) (S.M.D.); Huntsville, Muskoka Dist., May 30 (B.R.O.); Chaffeys Locks, Leeds Co., May 30 (2) (visiting Amelanchier blossoms) (P.W.); Perth Rd., Frontenac Co., May (about 6 collected, around white pine) (P.W.); Latchford, Timiskaming Dist., June 7 (J.W.).

Callophrys (Incisalia) polios (Cook & Watson)

Pinery Prov. Park, Lambton Co., May 18 (20 obs.) (S.M.D.) (B.R.O.); Chaffeys Locks, Leeds Co., May (1) (P.W.); Perth Rd., Frontenac Co., May (3) (P.W.).

Callophrys (Mitoura) gryneus (Huebner)

Shannonville, Hastings Co., May 30 (S.M.D.), May 31 (B.R.O.)

Strymon melinus (Huebner)

St. Williams, Norfolk Co., May 9 (S.M.D.); Kaladar, Lennox & Addington Co., July 17 (2) (P.W.); Parham, Frontenac Co., July 22 (1) (J.C.E.R.); Perth Rd. Frontenac Co., Aug. 20 (1+) (P.W.).

Gerydini

Feniseca tarquinius (Fabricius)

Minaki, Kenora Dist., July 25, 27 (W.E.); St. Williams, Norfolk Co., July 25 (1), Aug. 18 (2) (A.M.); Leaskdale, Ontario Co., late July (larva in all stages and chrysalids on alders along Uxbridge Brook) (P.M.C.); Chaffeys Locks, Leeds Co., June (1) (J.C.E.R.); Chaffeys Locks, Sept., (about 30 larvae collected among woolly alder aphids on Alnus, one of these pupated and produced an adult on Oct. 3; the others are still developing) (P.W.); Bedford Mills, Frontenac Co., Sept. 28 (several larvae among woolly alder aphids on Alnus branches) (P.W.).

Lycaenini

Lycaena dorcas Kirby

Oba, Algoma Dist., July 22 (W.E.); Longlac, Thunder Bay Dist., July 23 (W.E.); Inverhuron Prov. Park, Bruce Co., July 25 (P.D.S.); Oliphant, Bruce Co., (Bruce Pen.) Aug. 15 (female ovaposition on Shrubby Cinquefoil, Potentilla fruticosa, egg hibernating) (W.P.Jr.), Aug. 17 (B.R.O.).

Lycaena epixanthe (Boisduval & LeConte)

Perth Rd., Frontenac Co., in sphagnum bog, June 22 (1), July (1)(P.W.); Perth Road Bog, July 4 (R.R.M.); a new colony discovered in King Twp., York Co., July 1 about 10 males were observed; on July 5, males and females were observed in the ratio (P.M.C.); Glen Morris, Brant Co., July 18 (S.M.D.); along Opeongo Road, Algonquin Prov. Park, July 21, 22 (common on white flower along dirt road)(D.S.); Algonquin Prov. Park, July 22 (B.R.O.).

Lycaena helloides (Boisduval)

Killarney Prov. Park, Manitoulin Dist., Aug. 18 (B.R.O.).

Lycaena phlaeas americana Harris

St. Williams, Norfolk Co., May 22, July 18 (S.M.D.), May 27, July 21 (B.R.O.); Gravenhurst, Muskoka Dist., June 14 (B.R.O.); Port Sydney, Muskoka Dist., June 14 (R.R.M.); Lake of Two Rivers, Algonquin Prov. Park, June 25 (G.P.B.); Midland (Wye Marsh) Simcoe Co., June 28 (R.R.M.); Mew Lake Airfield, Algonquin Prov. Park, July 4, 5 (2 small colony nr. blueberry patch - 8 specimens observed) (D.S.); 10th Line, Halton Co., (nr. Streetsville), July 5 (A.B.); Stevensville, Welland Co., July 17, 23, Aug. 4 (G.P.B.); Grand Bend, July 18 (first one seen in this area in many years) (Q.F.H.); Sault Ste. Marie, Algoma Dist., Aug. 24 (B.A.); Chaffeys Locks, Leeds Co., Sept. 20 (1 male) (P.W.).

Lycaena thoë Guérin - Méneville

Midland (Wye Marsh), Simcoe Co., June 20, 28 (R.R.M.), Aug. 29 (J.H.); Georgetown, Halton Co., June 21, 23, 27 (M.S.); Greenwood, Ontario Co., June 21, 28 (P.M.C.); Perth Rd., Frontenac Co., June 22 (1) (P.W.); Chaffeys Locks, Leeds Co., June 24 (1) (P.W.), July 4 (R.R.M.); Pefferlaw, York Co., June 28 (S.M.D.); Dyer Bay, Bruce Co., (Bruce Pen.), July 4 (S.M.D.); Huron Co., (usual numbers) (Q.F.H.); Dundas Marsh, Wentworth Co., July 10 (B.R.O.); Dundas, Wentworth Co., July 11 (S.M.D.); Thamesville, Kent Co., August 3 (A.B.); Ajax, Ontario Co., Aug. 9 (N.T.); St. Williams, Norfolk Co., Aug. 18 (A.M.); normally wide spread around Colbourne, Northumberland Co., only one caught this year, a male on Aug. 25 (W.J.D.E.); Ostrander, Oxford Co., Sept. 5 (R.R.M.).

Plebeiini

Plebeius argyrognomon scudderii (Edwards)

Armstrong, Thunder Bay Dist., July 24 (W.E.).

Plebeius melissa (Edwards)

St. Williams, Norfolk Co., June 2, July 21 (B.R.O.), June 6 (A.B.) (R.R.M.), June 6, July 25, Aug. 18 (A.M.), July 18 (S.M.D.).

Plebeius saepiolus (Boisduval)

Near Hearst, Cochrane Dist., June 14; near Cavell, Thunder Bay Dist., Highway 643, June 16; 25 miles west of Geraldton, Thunder Bay Dist., June 17 ( 22 specimens of both sexes found feeding on camp patch of gravel. They were in company with 1 *Erebia disa*, 1 *Papilio glaucus*, 1 *Phyciodes tharos* and 1 *Carterocephalus palaemon*) (W.J.D.E.); Cochrane, Cochrane Dist., July 3 - 5 (B.R.O.); Manitouwadge, Thunder Bay Dist., June 29; Klotz Lake, Thunder Bay Dist., June 29 (over 300 seen); Chapleau, Sudbury Dist., June 29, Matheson, Cochrane Dist., July 2 (S.M.D.).

Glaucopsyche lygdamus (Doubleday)

Killaloe Sta., and 4 miles west of same, Renfrew Co., May 28 (P.D.S.); Chaffeys Locks, Leeds Co., about May 30 ( 1 male ) (P.W.); Latchford, Timiskaming Dist., June 7 (J.W.); Moosonee, Cochrane Dist., June 8 (S.M.D.); Cochrane, Cochrane Dist., June 13 (S.M.D.); 12 miles west of Cochrane, Cochrane Dist., June 14; 20 miles east of Hearst, Cochrane Dist., June 14; 25 miles nr. of Geraldton, Thunder Bay Dist., June 15 (W.J.D.E.); Driftwood Cove, Bruce Co., June 27 (P.M.C.); Manitouwadge, Thunder Bay Dist., June 28 (S.M.D.).

Everes amyntula (Boisduval)

20 miles east of Hearst, Cochrane Dist., June 14; Macleod Prov. Park, Geraldton, Thunder Bay Dist., June 16 (W.J.D.E.)

Everes comyntas (Godart)

St. Williams, Norfolk Co., May 22, July 18 (S.M.D.), July 21 (B.R.O.), July 25, Aug. 18 (A.M.); does not seem to be common in Northumberland Co., first seen May 10. One very small male caught nr. Brighton, Northumberland Co., Aug. 12 (W.J.D.E.); Pt. Pelee, Essex Co., Aug. 3 (B.R.O.)(S.M.D.); Waterford, Norfolk Co., Aug. 3 (female ovaposition on *Lespedeza capitata*, caterpillar on showy Tick-Trefoil, *Desmodium canadense*)(W.P.Jr.); Ajax, Ontario Co., Aug. 9 (N.T.); Rice Lake, Aug. 25 (S.M.D.); Midland, (Wye Marsh) Simcoe Co., Sept. 1 (J.H.); Chaffeys Locks, Leeds Co., June, Sept. 20 (1 male) (P.W.).

Celastrina argiolus lucia (Kirby)

Moosonee, Cochrane Dist., June 10 (over 100 seen)(S.M.D.); 12 miles west of Cochrane, Cochrane Dist., June 14, 20 miles east of Hearst, Cochrane Dist., June 14, 10 miles north of Geraldton, Thunder Bay Dist., June 15 (W.J.D.E.).

Celastrina argiolus pseudargiolus (Boisduval & LeConte)

First observed at Perth Rd., Frontenac Co., April 30 (.P.W.); last observed at Rondeau Prov. Park, Kent Co., Sept. 12 (A.M.) Commonly taken by most of our contributors wherever they collected in between these dates.

## CONTRIBUTORS

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Robert W. Cameron (R.W.C.); Paul M. Catling (P.M.C.);  
Sid M. Daniels (S.M.D.); W.J.D. Eberlie (W.J.D.E.);  
W. Edmonds (W.E.); J.R. Holliday (J.R.H.); J.P. Holmes (J.P.H.);  
John Huber (J.H.); Alan MacNaughton (A.M.); Ron R. Michaels (R.R.M.);  
Brian R. Ottaway (B.R.O.); Walter Plath Jr. (W.P.Jr.);  
Walter Plath Sr. (W.P. Sr.); J.C.E. Riotte (J.C.E.R.); Darryl  
Stewart (D.S.); Michael Snider (M.S.); Paul D. Syme (P.D.S.);  
Norm Trembley (N.T.); C.H. Walker (C.H.W.); John Walty (J.W.);  
Philip Ward (P.W.).

HIGHLIGHTS OF MOTH COLLECTING IN ONTARIO

OVER THE PAST FEW YEARS

Compiled by R. Michaels and J.C.E. Riotte

HEPIALIDAE

Sthenopsis auratus Grote

Baysville (Echo Lake) (1958) (I.M.S.); Mt. Irwin  
(Crystal Lake) (W.P.); Chaffeys Locks (1970) (J.C.E.R.).

Sthenopsis thule Strecker

Chaffeys Locks (1966, 1969) (J.C.E.R.).

LIMACODIDAE

Sisyrosea textula (Herrich-Schaeffer)

One caterpillar found at Dundas, which is up to now the  
northernmost Ontario record for this species (1970) (H.F.).

SATURNIIDAE

Eacles imperialis pini Michener

Melanic specimens were taken in number in Parry Sound  
District (1969, 1970) (B.A., N.T.).

Syssphinx (Sphingicampa) bicolor (Harris)

Having been caught in Dunnville (1957, 1962), this species  
has now been taken also in St. Catharines (1970). As this  
species is very important for zoogeographical purposes, it  
should be looked for very seriously.

Anisota (Anisota) finlaysoni Riotte

For the first time in S.W. Ontario, caterpillars were found  
at St. Williams (Aug. 1970) (W.P.). This species now joins  
the number of species which occur on the north shore of Lake  
Erie and then again at the eastern end of Lake Ontario. We  
have here a practical example as to how field trips of our  
members may have very far reaching results.

Hyalophora (Hyalophora) columbia (Smith)

This species was thought to be extinct because of the Larch  
Saw Flies, after many years it has recently been found in the  
Districts of Muskoka and Parry Sound. (1968, 1969) (L.K., E.M.).

Hyalophora (Callosamia) angulifera (Walker)

Since 1965, this specie was known to be in Rondeau Prov. Park  
but now has been caught at Turkey Point (1969) (B.A.).  
Everyone collecting on the north shore of Lake Erie should  
watch for this specie wherever tulip trees are still growing.

SPHINGIDAE

Dolba hylaeus (Drury)

Only sporadic records from Ontario: Mazinow Lake (Wood), Grimsby (C.N.C.), Mer Bleue (C.N.C.), Skeleton Lake (C.N.C.), and now a new record from Perth Rd. (one male) (1970) (P.W.).

Sphinx eremitus (Huebner)

Also rare and only known from a few scattered old records; recent records are more numerous: Rondeau Prov. Park (1965) (J.C.E.R.); Kendal (1967) (J.C.E.R.); Campbellville (1970) (A.M.). This specie has not too common food plant: mints (Salvia, Mentha, Monarda).

GEOMETRIDAE

Dichorda iridaria Guenee

Seems to be not too rare in eastern Ontario. Mt. Irwin (Crystal Lake) (W.P.); Chaffeys Locks (J.C.E.R.)

Lygris molliculata Walker

Dunnville (1966, 1967) (W.P.); Cawaja Beach (1968) (J.C.E.R.)

Itame sulphurea Packard

Up to now, only known from northern and western Ontario, now a new record from Pinery Prov. Park (1969) (J.G.W.).

Hesperumia sulphuraria Packard

New records from Mt. Irwin (1970) (W.P.) and Pointe au Baril (1968) (B.A.).

Cabera borealis Hulst

A new Ontario record - Longlac, June 24, 1969 (W.P.).

Anagoga occiduaria Walker

Now also from Campbellville (1968) (W.P.).

Cingilia catenaria Cramer

Mostly northern and near bogs; a large colony was discovered at the Copetown Bog (1969) (W.P.).

Cingilia pellucidaria Packard

A single male taken by W. Plath at Mt. Irwin (Crystal Lake) Sept. 9, 1967 constitutes a new Ontario record.

EPIPLEMIDAE

Callizia amorata Packard

In recent years, a few specimens were taken at different new localities as Cawaja Beach (1968) and Chaffeys Locks (1970).

DREPANIDAE

Eudeilinea herminiata (Guenee)

The females are dayflying and not uncommon on swampy places. One female that was caught laid eggs in the butterfly net ... the rearing was successful. The caterpillars are on cornus, spin two leaves together and look somewhat like pyralid larvae.

NOTODONTIDAE

Heterocampa subrotata Harvey

Caught on Pelee Island only (1965).

NOCTUIDAE

Psychomorpha epimenis Drury

This specie was observed on the wing on Pelee Island (1965) and taken in Homer Watson Park, Kitchener (May 23, 1966) (A.M.) which makes a new Ontario record.

ARCTIIDAE

Cisthene unifascia Grote and Robinson

Chaffey's Locks (1963, 1967) (J.C.E.R., P.H.), only single specimens.

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