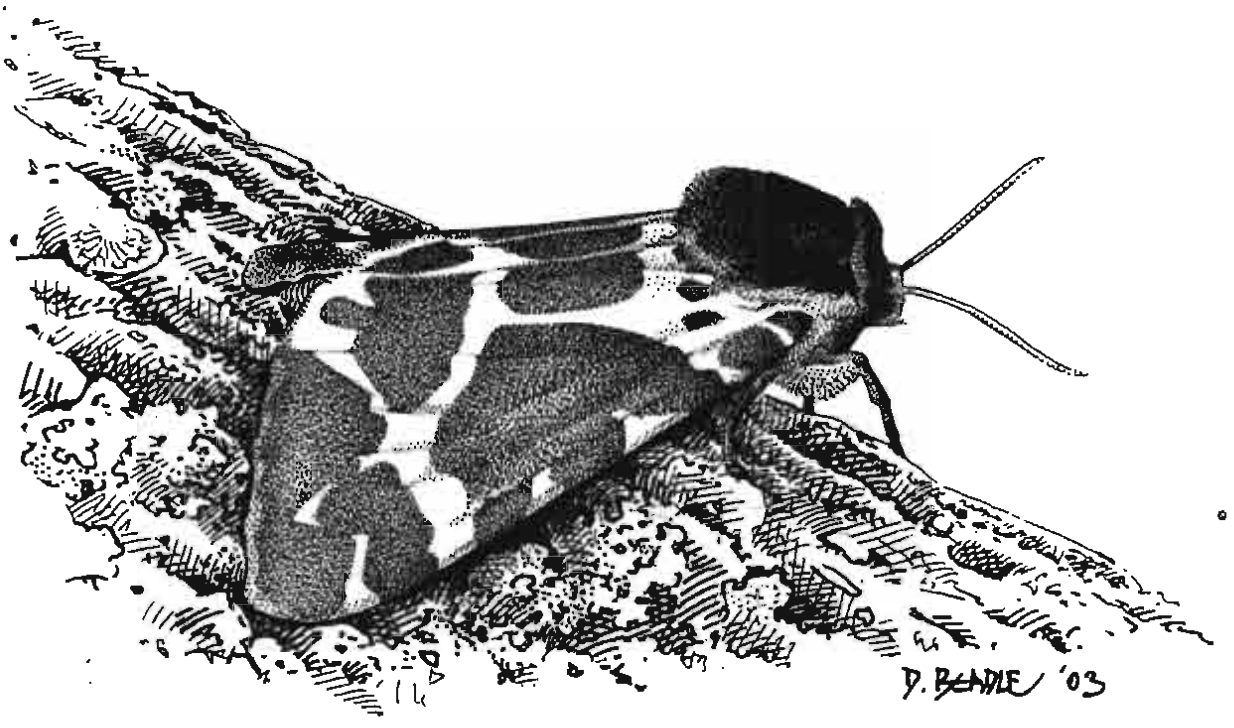
Ontario Lepidoptera 2002



Edited and Compiled by
Colin D. Jones and Jeffrey P. Crolla

Toronto Entomologists' Association

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TORONTO ENTOMOLOGISTS' ASSOCIATION (TEA)

The TEA is a non-profit educational and scientific organization formed to promote interest in insects, to encourage co-operation among amateur and professional entomologists, to educate and inform non-entomologists about insects, entomology and related fields, to aid in the preservation of insects and their habitats and to issue publications in support of these objectives.

The TEA is a registered charity (#1069095-21); All donations are tax creditable.

Membership Information:

Annual dues:
Individual-$25
Student-$15
Family-$30

All membership queries and payment of dues can be directed to Alan J. Hanks, Treasurer, 34 Seaton Drive, Aurora, Ontario, Canada L4G 2K1. Tel: (905) 727-6993. email: alan.hanks@sympatico.ca

Publications received as part of a TEA membership include:

- 3 issues per year of our newsjournal *Ontario Insects*
- annual *Ontario Lepidoptera* summary
- discounts on sales of other publications including *Ontario Odonata*

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The TEA is run by a volunteer board. The executive officers are elected every two years.

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ONTARIO LEPIDOPTERA

Published annually by the Toronto Entomologists' Association.

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Information on submitting records, notes and articles to *Ontario Lepidoptera* can be obtained by contacting an editor:

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COVER ILLUSTRATION

Great Tiger Moth *Arctia caja americana* by David Beadle (copyright David D. Beadle 2003).

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Compact Disc Insert

GENERAL INTRODUCTION

As readers have no doubt already noticed, the title of the TEA's annual lepidoptera summary (now in its 34th year!) has been changed this year to *Ontario Lepidoptera*, to provide a short descriptive title and also to complement the TEA's other regular publications, *Ontario Insects* and *Ontario Odonata*.

Beginning this year, all records of lepidoptera received from contributors will be incorporated into two databases, one for butterflies & skippers and one for moths, to provide a comprehensive and cumulative annual record of Ontario's lepidoptera fauna. In concert with the move to a database format, each year's issue of *Ontario Lepidoptera* will include printed summaries focusing on noteworthy records for the season for both butterflies & skippers (Colin Jones) and moths (Jeff Crolla). Data for all records of all species received for the year (much more data than can be included in the printed summary!) will also be included in two tables found on a CD inserted at the back of each issue, a new feature in a TEA publication.

We hope that both the butterfly and moth tables on the CD demonstrate just how much the database can accomplish, and the value of all records received, not just those of rare and unusual species. We recognize that not everyone has access to a computer and so may not be able to view these files. If you would like a printed copy of either or both of the butterfly or moth tables, please contact Colin Jones (contact information below).

The contents of this publication have been checked for errors and accuracy as much as possible. Please notify us of any corrections of errors or omissions, and these will be included in future issues of Ontario Lepidoptera and incorporated into the database.

Records and notes or articles for the 2003 season should be submitted by February 28, 2004 to the compilers as follows:

For Butterflies and Skippers:
Colin Jones
Box 182, Lakefield, ON
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For Moths:
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Tel: 416-533-2267
email: jeff@primus.ca

Information on how to submit records for the database can be obtained from the compiler(s) – the format is basically the same for butterflies and moths with minor differences.

ACKNOWLEDGEMENTS

Ontario Lepidoptera would not be possible without the considerable effort of the contributors (listed below) who take the time to submit their records each year. We would also like to thank those who submitted photographs, notes and articles from 2002. Special thanks to Don Sutherland for reviewing the summary and offering helpful suggestions and to Dave Beadle for providing the terrific cover illustration.

LIST OF CONTRIBUTORS

Ontario Lepidoptera 2002 summarizes data and observations of butterflies, skippers, and moths for the 2002 season in the province of Ontario, Canada, received from the contributors and observers listed below:

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AT	Adam Timpf	Waisingham
AW	Alan Wormington	Leamington
AWh	Ann White	London
AWo	Al Woodhouse	Waterloo
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BDS	Brad D. Steinberg	Algonquin Park
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BG	Bill Gilmore	Brighton
BH	Barry Harrison	Scarborough
BM	Bev McLauchlan	Toronto
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CP	Carey Purdon	Golden Lake
CPR	Chris P. Robinson	Glenburnie
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JBr	Jean Brereton	Golden Lake
JC	Jasmine Chabot	Peterborough
JD	Joanne Dewey	Picton
JF	Jim Fairchild	Scarborough
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MPP	MacGregor Point Park Staff	Port Elgin
MR	Melissa Rose	Peterborough
MRa	Mary Rapati	Port Elgin
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NGE	Nicholas G. Escott	Thunder Bay
OL	O. Lonsdale	
PAR	Peter A. Read	Komoka
PC	Philip Careless	Toronto
PCh	Pete Chapman	Hungry Hollow
PDP	Paul D. Pratt	LaSalle
PM	Paul McGaw	Scarborough
PN	P. Norlock	Algonquin Park
PPNHN	Point Pelee Natural History News	
PSB	Peter S. Burke	London
RAL	Ross A. Layberry	Kinburn
RB	Remi Buisse	
RGT	Ron G. Tozer	Dwight
RHC	Robert H. Curry	Burlington
RJY	Robert J. Yukich	Toronto
RLB	Robert L. Bowles	Orillia
RLW	Robert L. Waldhuber	Hamilton
RM	Rod Murray	Oakville
RME	Russell M. Eynon	England (U.K.)
RP	Rayfield Pye	Oshawa
RR	Radja Rajagopalan	Peterborough
RS	Ron Stager	Gravenhurst
RZB	Rob Z. Dobos	Hamilton
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SER	Sarah E. Rupert	Leamington
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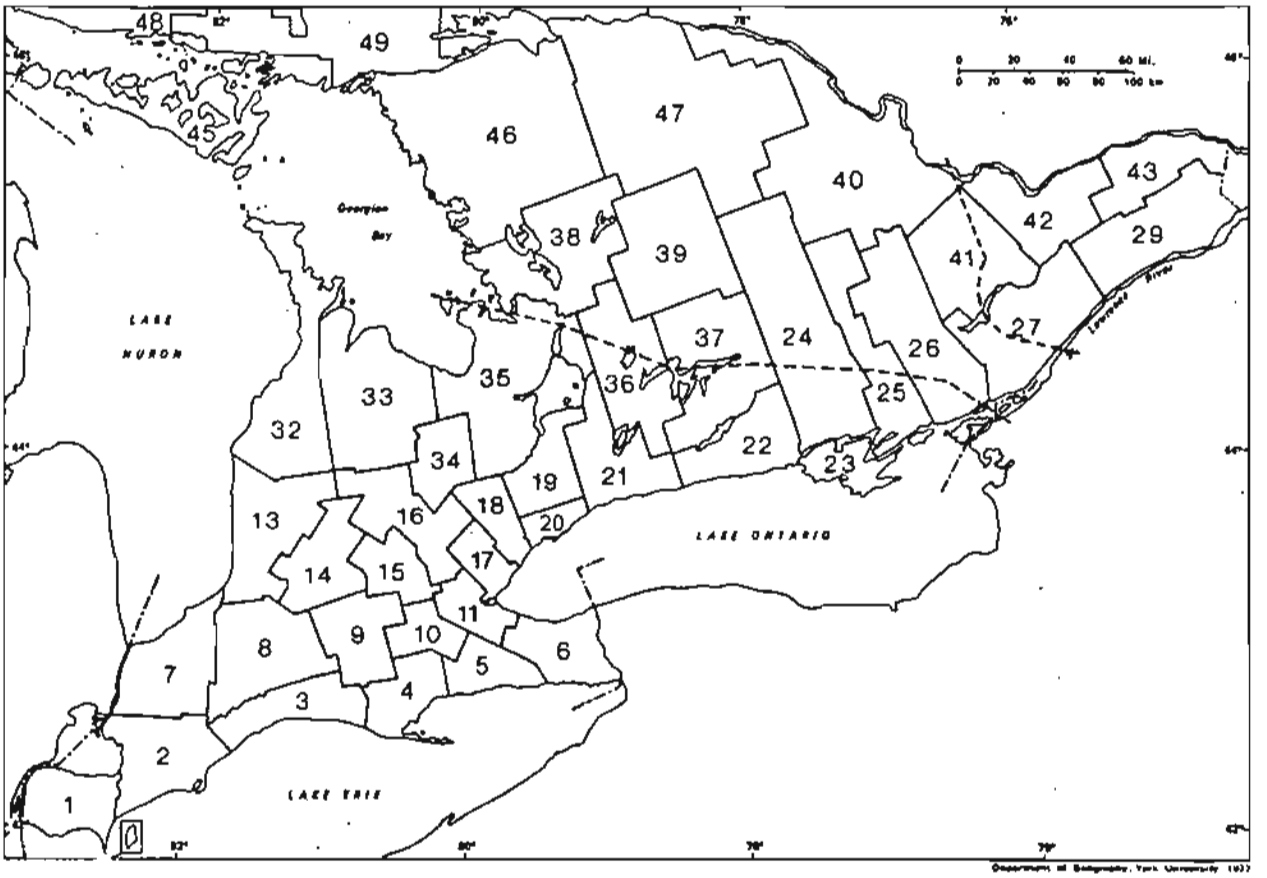
WIM	Dr. William D. & Irene McIlveen	Acton
WJC	William J. Crins	Peterborough
WJDE	Dr. W. John D. Eberlie	Port Hope
WKG	William K. Godsoe	Ottawa
YB	Yvette Bree	Bloomfield

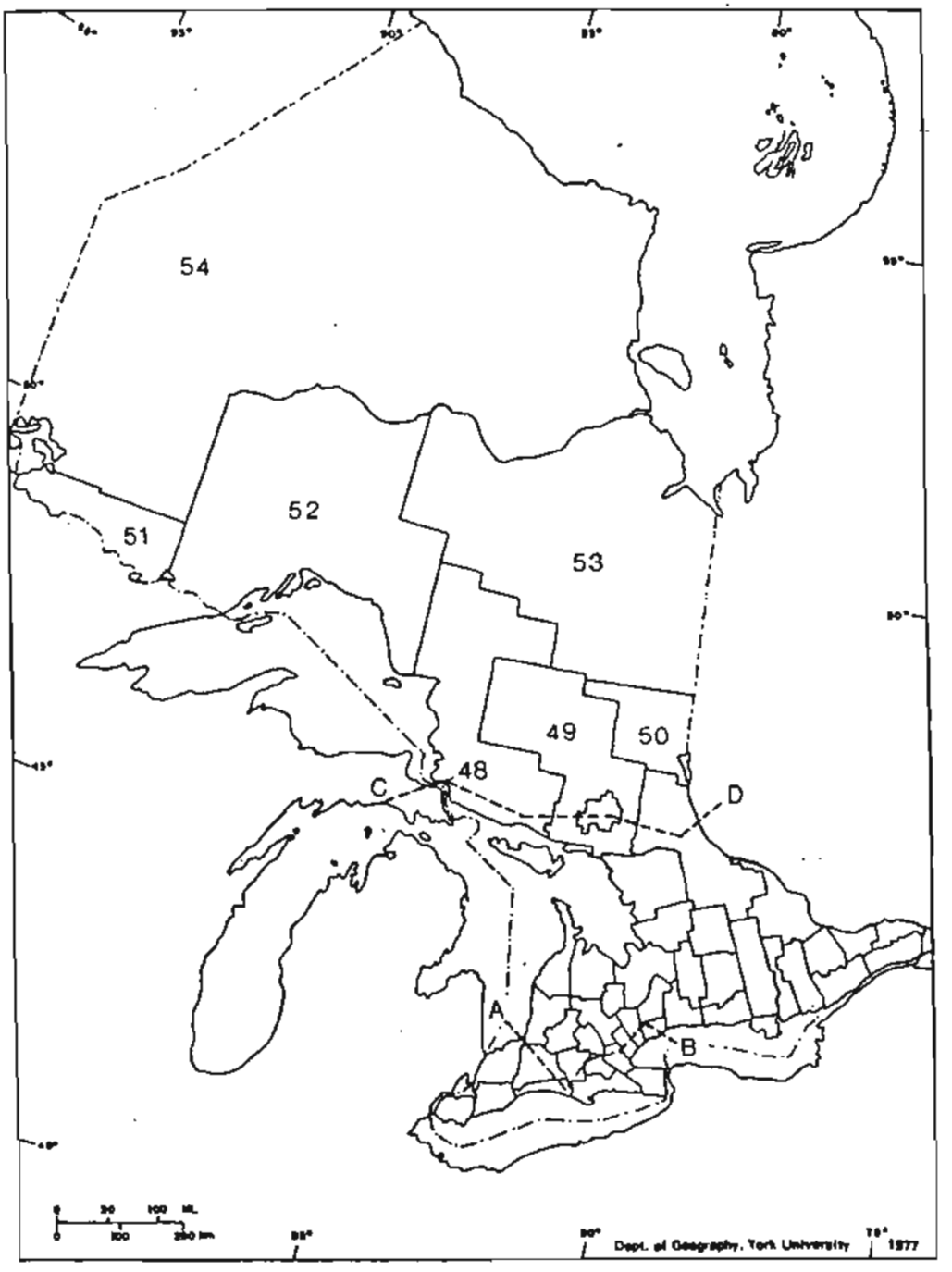
C.A. = Conservation Area
m.obs. = multiple observers
N.P. = National Park
P.P. = Provincial Park

COUNTIES, DISTRICTS AND REGIONAL MUNICIPALITIES OF ONTARIO



Counties, Districts and Regional Muncipalities of southern Ontario. The dotted line indicates the approximate southern and eastern limits of the Canadian Shield in Ontario. The 4-letter codes listed below are used in both the butterfy and moth summaries (an alphabetical listing of county codes can be found on the CD).

1	ESSE	Essex County
2	KENT	Municipality of Chatham-Kent
3	ELGI	Elgin County
4	NORF	Norfolk County
5	HALD	Haldimand County
6	NIAG	Regional Municipality of Niagara
7	LAMB	Lambton County
8	MIDD	Middlesex County
9	OXFO	Oxford County
10	BRAN	Brant County
11	HAMI	Regional Municipality of Hamilton-Wentworth
13	HURO	Huron County
14	PERT	Perth County
15	WATE	Regional Municipality of Waterloo
16	WELL	Wellington County
17	HALT	Regional Municipality of Halton
18	PEEL	Regional Municipality of Peel
19	YORK	Regional Municipality of York
20	METR	Metropolitan Toronto
21	DURH	Regional Municipality of Durham
22	NORT	Northumberland County
23	PRIN	Prince Edward County
24	HAST	Hastings County
25	LENN	Lennox and Addington County
26	FRON	Frontenac County
27	LEED	United Counties of Leeds and Grenville
29	STOR	United Counties of Stormont, Dundas and Glengarry
32	BRUC	Bruce County
33	GREY	Grey County
34	DUFF	Dufferin County
35	SIMC	Simcoe County
36	VICT	Victoria County
37	PETE	Peterborough County
38	MUSK	District Municipality of Muskoka
39	HALI	Haliburton County
40	RENF	Renfrew County
41	LANA	Lanark County
42	OTTA	Regional Municipality of Ottawa-Carleton
43	PRES	United Counties of Prescott and Russell
45	MANI	Manitoulin District
46	PARR	Parry Sound District
47	NIPI	Nipissing District



Map of Ontario indicating the districts of northern Ontario. The line A-B represents the approximate northern limit of the Carolinian Zone (see Soper 1954, 1962). Line C-D approximates the 40 degree F mean daily temperature for the year isotherm, and has been adopted here as the northern limit of southern Ontario. The 4-letter codes listed below are used in both the butterfly and moth summaries (an alphabetical listing of county codes can be found on the CD).

48	ALGO	Algoma District
49	SUDB	Sudbury District (including City of Sudbury)
50	TIMI	Timiskaming District
51	RAIN	Rainy River District
52	THUN	Thunder Bay District
53	COCH	Cochrane District
54	KENO	Kenora District

CORRECTIONS TO PREVIOUS SUMMARIES

2000 Summary (TEA Occ. Pub.#33-2001)

On Page 55 – delete the record of *Apamea ophiogramma* dated 0008.

On Page 63 – delete the record of *Anathix ralla* under 19 dated 0009.

2001 Summary (TEA Occ. Pub.#34-2002)

On Page 5 – the year in the title at top of the page should be 2001
– the Zebra Swallowtail reported from Erie Beach on June 26th by Steve Charbonneau was actually a 2002 record (see the details on page 26).
– The beginning of paragraph 5 should read "On August 16"

On page 6 – under "Special Notes" there is a brief article on the discovery in July 2000 of a colony of Baltimore Checkerspots at Rainy River. In July 1996, Bob Yukich observed 2 individuals of this species at Rainy River. This is noted in the TEA summary for 1996, publication #29 - 97 on page 45.

On page 19 – Mike King's initials were omitted from the 2001 Zabulon Skipper sighting - he was one of the principal finders.

On page 20 – under Dun Skipper, Bob Yukich's Aug. 6 sightings at Point Pelee are duplicated 4 lines later in the report submitted by Alan Wormington.

On Page 22 – for Canadian Tiger Swallowtail, the observer for the Ajax records should be DP only.

On Page 50 – the species name in the photo caption should read *Korscheltellus lupulinus*.

On Page 58 – for the first entry under *Smerinthus jamaicensis*, the initials AHR should read AR.

On Page 61 – in the second and third entry under *Ascalapha odorata*, the & symbol should read ♀ [ie. symbol for female].

On Page 63 – under 9656 *Platyperigea montana* change SECOND ONTARIO RECORD to FIRST ONTARIO RECORD [see note on p. 90 of Ontario Lepidoptera 2002 for details].

On Page 74 – the species name in the photo caption should read *fernaldella*.

In addition, both James Kamstra and J. Klymko were listed in the 2001 summary under the initials JK. The initials for J. Klymko should be changed to JKl in the list of contributors on Page 1, in the *Selected Reports of Moths in Ontario in 2001* under species with Hodges numbers 2363, 7828 and 11164, and in the *Concise Cyclical Summary of Reports of Moths in Ontario* under species with Hodges numbers 2363, 3334, 3539, 3602, 4936 and 5361. Any remaining instances of JK in the 2001 butterfly or moth summaries refer to James Kamstra.

A BRIEF HISTORY OF THE SUMMARY

The TEA Annual Lepidoptera Summary was created in 1969 by Paul M. Catling, C.H. Walker, and J.C.E. Riotte. Along with W.M. Edmonds they carried the project forward over the next two years, up to and including 1971. The next summary was not produced until 1975, when Quimby F. Hess summarized three years of observations (1972-74). Following the 1975 field season, Alan J. Hanks joined Quimby in the compilation and production of the summary and they remained as a team until 1991. Over this time, the summary began to expand in scope to include an increasing number of articles, notes and papers and the inclusion of a growing list of moths, not to mention a growing list of observers from across the province. From 1984-1987, Barry Harrison took over the responsibility of compiling the moth summary. The 1991 summary saw the beginning of Duncan Robertson's significant contribution to the summary in the form of the *Continuous Cyclical Summary of Reports of Moths in Ontario*. In 1992, Duncan fully took over the moth summary, and Quimby stepped down from his role as compiler and editor. Until 2000, Alan and Duncan, working as a team, continued to produce an excellent summary, year after year. In 2001, Duncan announced that he was stepping down from the role of compiler of the moths. Jeff Crolla agreed to take over the role and together with Alan produced the 2001 summary. Last year, Alan announced that he was stepping down from his position. Beginning with this 2002 summary, Colin Jones has taken Alan's place.

Colin and Jeff would like to acknowledge all of the hard work and dedication that the past compilers, editors and contributors have put into the summaries, especially the long-term dedication of Alan Hanks, Quimby Hess and Duncan Robertson. We hope to continue the tradition of producing an annual summary of Lepidoptera that proves useful and informative to the TEA membership and to others wishing to learn more about the distribution, biology, ecology, and conservation of Ontario's butterflies and moths. We sincerely hope that past contributors will continue to provide their valuable records to the annual summary. We also hope that, over time, we will be able to recruit additional contributors, especially from areas in the province that are currently under-represented such as Eastern Ontario and Northern Ontario.

THE POWER OF DATABASING OUR RECORDS AND HOW YOU CAN HELP

As was mentioned in the General Introduction, beginning with this summary all records received from contributors will be incorporated into two databases, one for butterflies & skippers and one for moths.

Most people these days have a personal computer at home and use it for record keeping. In order to greatly speed up the process of databasing records submitted for *Ontario Lepidoptera* we are asking that contributors submit records in electronic form, preferably in a spreadsheet (e.g. Microsoft Excel, Corel Quattro Pro) or database (e.g. Microsoft Access, Corel Paradox) format. The information submitted is basically the same as in the past, the only real difference is the format of submitting the records.

There is also a technological advance that has become much more accessible in recent years that has given us the ability to easily assign geographic data to observations (allowing us to easily map them for projects such as *The Ontario Butterfly Atlas*, for example). This is the advent of the hand-held GPS (Global Positioning System). A growing number of field biologists and amateur naturalists and entomologists have GPS units and are finding them an extremely useful and handy tool.

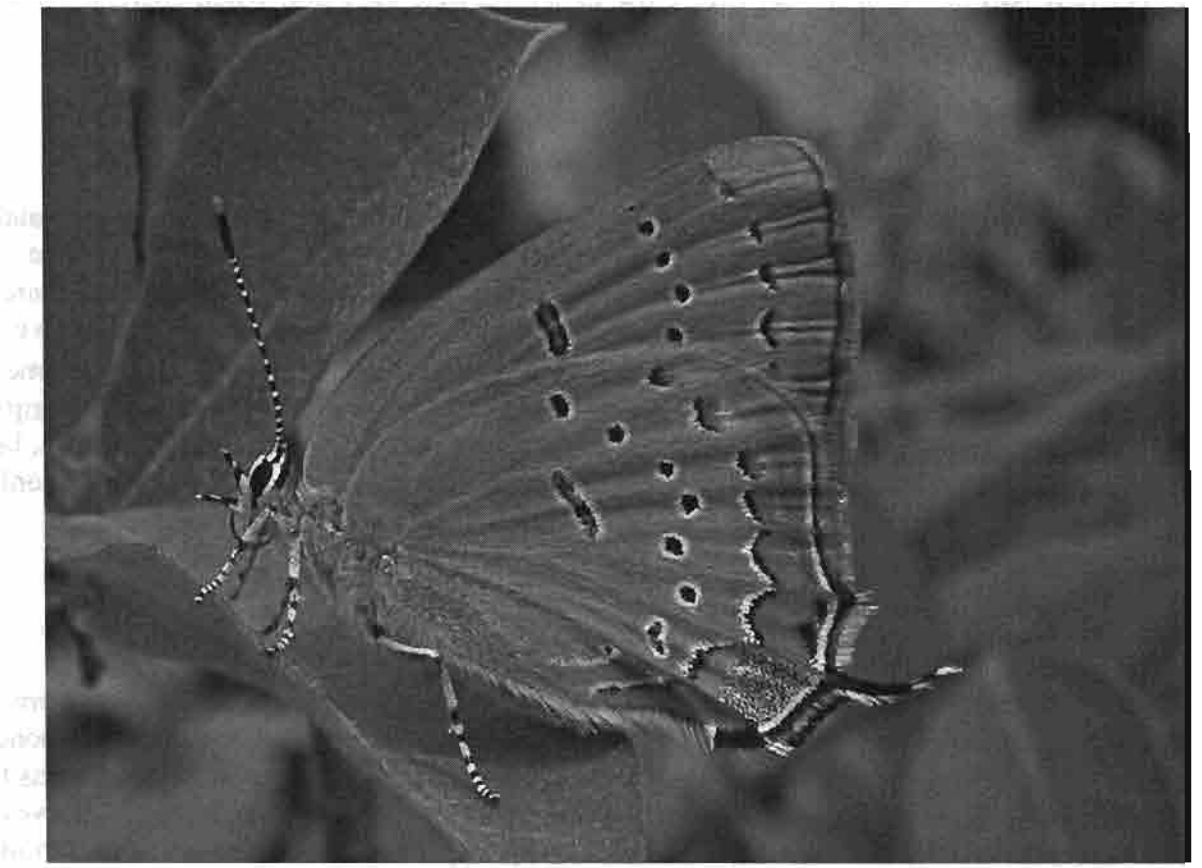
For those of you who own or have access to a GPS unit (or to topographic maps of your area) we are also asking that you supply geographic coordinates (UTM grid reference or Latitude/Longitude) with your records. Although these coordinates can be read from a topographic map, with the advent of the handheld GPS unit (available for $200 or less from most camping and outdoors stores, including Canadian Tire) such coordinates can be obtained much more quickly, easily and accurately than they can from a map.

For those contributors who cannot or wish not to supply records in a database format, records submitted in another electronic format (word-processing application such as Microsoft Word) or even in handwritten format are better than nothing at all. In addition, if you are unable to assign a geographic reference to your records, the raw records are fine. We as compilers will enter the records into the database and attempt to geo-reference them ourselves. Obviously, the more you can do as contributors, the easier our job as compilers becomes.

There are several reasons for moving to such a format for data submission. Increasingly, data on invertebrates (especially butterflies, dragonflies and damselflies) is being used to aid in conservation land-use planning. Most of this readership would probably agree that this is a very positive movement. The TEA and the contributors to the annual lepidoptera summary have an opportunity, by databasing their records and attaching precise geographic coordinates to the records, to add greatly to the conservation of butterflies and moths. The power of a fully databased set of records is incredible. The records can easily be sorted or manipulated in any number of ways in order to: i) produce a county list; ii) map all of the records for a particular species; iii) compare records from one time frame to another (e.g. 1800-1950 with 1951-present). In these ways, once fully databased, the application of the database becomes much more useful than just the production of the annual summary. For example, the TEA is currently working on the 2nd Edition of the Ontario Butterfly Atlas. In order to produce the maps for this edition, all of the records from past summaries are currently being databased and geo-referenced - not a quick and simple task. By databasing and georeferencing the records on an annual basis, the production of the 3rd Edition (say in 2012, for example), will be a relatively easy product to produce.

More detailed information on how to submit records (including how to supply geographic coordinates), and a sample of the database structure can be obtained by contacting the relevant compiler(s) (see contact information on page 1).

Butterflies and Skippers 2002



Acadian Hairstreak at Cold Creek Road, Renfrew Co., 6 July 2002 (Photo: Jason Dombroskie)

BUTTERFLY NOTES FROM 2002

by Ross A. Layberry

General notes for 2002

I have to say that 2002 was absolutely the most dismal collecting season that I have ever experienced. Thank goodness that it was not like that when I first started collecting; who knows, I may have finished up, God forbid, by becoming a bird watcher!! The first month was just poor, but not exceptionally so, but by mid-June it was hard to find any butterflies at all in many places, and this continued to the end of the season. The only two species that were even close to normal were the Little Wood-Satyr, *Megisto cymela,* and the Northern Pearly-Eye, *Enodia anthedon.*

Cherry Gall Azure, *Celastrina* sp.

The Cherry Gall Azure pupa, from 2001 (see page 10 of 2001 TEA Lepidoptera Summary), in a small sealed vial, beneath an inch of dead leaves under the original tree, survived the winter just fine, but could not take the weird spring. The snow melted off it on March 3, and it stayed exposed until March 18 when it was buried in snow again, after having experienced two days with the temperature above 80∞F. It was exposed again March 29, buried on April 1, exposed on April 3, and buried a final time April 28 and 29. Amazingly, on April 30 it still appeared healthy, firm, glossy with traces of the original colours left. I checked it every day until early June, when a close examination showed it to be dull, black and definitely dead. I saw no adults or larvae; even the normally common Spring Azure was seen only occasionally, in ones and twos.

Harvester, *Feniseca tarquinius*

On 26 September, 2002, I was in a dry, shaded area about 30 feet from a small beaver pond, near my home. I noticed a small bush of Speckled Alder, on which three large branches were densely festooned with the white "wool" of Woolly Aphids. I could not recall ever seeing this so late in the year, so as I have done (unsuccessfully) at least a hundred times before, I checked to see if there were any Harvester larvae hidden under the wool. I had almost finished a close-up inspection of each branch when I thought that I could see a small area of darker and lighter bands, across a large patch of wool. Probing it gently disclosed a fifth-instar Harvester larva. I went back over the branches again, probing each clump of wool, and this discovered four more larvae, all absolutely invisible to the eye. All were on the only more-or-less horizontal branch, and all were on the sheltered underside of it. When I returned with a small vial to collect one, I found a sixth larva crawling up the trunk of the bush, only about a foot from the ground, and the others starting to get quite active. I called my friend, John T. Fowler, and he came over to photograph the larvae *in situ*. By the time he arrived all larvae were crawling about on the branch, but he got some good photos. By the time he finished two larvae had disappeared; I gave him one to photograph later, as a pupa, and kept the other three myself, in a large jar with several twigs festooned with aphid wool. They refused to stay on the twigs, and finally tied themselves down with silk inside the upper rim of the jar, on September 30. They pupated on October 2, as did the one John had

taken home. I presume that this means that they would have crawled to the ground to pupate. On the other hand, the aphid wool was still in good shape, in fact it still is today, as I write (January 31, 2003), so maybe they would have stayed there: just one more thing to check next year.

I left the jar under the Alder bush until mid-October. I worried about losing the pupae, the way I had lost the Cherry Gall Azure pupa, so I built a cold-chamber in my basement. Attached to the inside of a north-facing window I built a box of 1/2 inch plywood lined with 1/2 inch styrofoam, sealed at all joints with masking tape. A maximum/minimum thermometer showed that it held a temperature almost exactly halfway between the basement temperature and the outside temperature; in other words, the heat loss through 2 square feet of glass and a window frame equaled that through about 12 square feet of plywood/styrofoam. The pupae will experience temperatures of at worst minus five degrees; it will be interesting to see how they survive this.

Pearl Crescent, *Phyciodes tharos*

Ever since 1995, when the Pearl Crescent was first recorded in the Ottawa area, we have wondered if it was always here, unrecognised, or if it has been expanding its range northward. Searching all known local collections failed to find any specimens from earlier than 1995. However, the species that we thought of as the Pearl Crescent, actually the Northern Crescent *Phyciodes cocyta,* was always so common and widespread that very few people bothered to catch them, even for identification purposes, so the lack of earlier specimens doesn't prove much.

Unlike *cocyta*, *tharos* occurs in local colonies, with large areas of apparently suitable habitat lacking the butterflies. One such area is a short stretch of road verge on either side of my driveway, and the first 50 yards of the driveway. It is dry, with coarse grass, goldenrods, thistles and three species of asters. *Cocyta* always occurs in small numbers there, and every year since 1995 I have, on many occasions, caught and examined a few crescents, looking for *tharos*. Until this year I had never found any. But on May 25, 2002 there were quite a few crescents flying. I caught seven, of which six proved to be *tharos*, and the other was a very fresh male *cocyta*, much bigger than the *tharos,* clearly different even on the wing. The *tharos* were seen on the 25, 26, 29 and 30 May, always just a few, just outside my driveway, always within about 25 feet of the same spot. I checked on and off throughout the year, but did not see them again, even when the second late generation should have been flying. So at least this colony was recently established; it may in fact not have survived the extremely hot dry summer. Maybe all northern colonies are similarly recent arrivals.

A SUMMARY OF ONTARIO BUTTERFLY COUNTS IN 2002

Compiled by Bob Bowles and Colin D. Jones

There were a total of 19 Ontario butterfly counts submitted and published in the 2002 Report: NABA Butterfly Counts (Swengel and Swengel 2003). In order to provide a concise summary of these counts we present the results in tabular format below. Two additional counts (Algonquin Park Highway 60 and Algonquin Park East) submitted late and not featured in the 2002 Report are also featured in the table. There were a few other counts conducted in Ontario in 2002 (Manion Corners, Clear Creek, Killarney Provincial Park and Muskoka) for which we have not received data.

Write-ups and summaries for most of these counts have already been printed, as follows:

Algonquin Park East – Ontario Insects Vol. 8, No. 3, Page 46
Algonquin Park Hwy 60 – Ontario Insects Vol. 8, No. 3, Page 46
Carden – Ontario Insects Vol. 8, No. 1, Page 16
Oshawa – Ontario Insects Vol. 8, No. 1, Page 8
Orillia – Ontario Insects Vol. 8, No. 1, Page 16
Toronto TEA – Ontario Insects Vol. 8, No. 1, Page 7
Windsor – http://www.ojibway.ca/naba02.htm
MacGregor Point – Hart's Tongue Herald (Owen Sound Field Naturalists) Vol. 15, No. 2 , Page 6
Skunk's Misery – The Cardinal (McIlwraith Field Naturalists of London) No. 188, Page 28
Sunderland – Ontario Insects Vol. 8, No. 2, Page 35
Toronto Centre – Ontario Insects Vol. 8, No. 1, Page 14
Haliburton – Ontario Insects Vol. 8, No. 2, Page 36
Rondeau Provincial Park – Ontario Insects Vol. 8, No. 1, Page 15
also see http://www.rondeauprovincialpark.ca/naba_2002.htm
Petroglyphs – The Orchid (Bulletin of the Peterborough Field Naturalists) Vol. 48, No. 6, Page 5
Pelee Island – Ontario Insects Vol. 8, No. 2, Page 34
Point Pelee – Point Pelee Natural History News Vol. 2, No. 3, Page 46

Table 1 lists, in chronological order, the 21 counts featured in this summary, along with the name and contact information of the count compilers. Table 2 lists the totals for each species recorded on these counts in 2002. The numbers along the top of Table 2 correspond to the counts listed in Table 1. The total number of individual butterflies, species and observers per count, as well as the date of each count is found at the bottom of Table 2.

References

Swengel, A.B. and S.R. Swengel. 2003. 2002 Report NABA Butterfly Counts. North American Butterfly Association Inc. New Jersey.

Table 1. Official NABA Butterfly Counts conducted in Ontario in 2002.

#	COUNT NAME	COMPILER	TELEPHONE	EMAIL
1	Algonquin Park East	Colin Jones	(705) 652-5004	colin.jones@mnr.gov.on.ca
2	Algonquin Park Hwy 60	Colin Jones	(705) 652-5004	colin.jones@mnr.gov.on.ca
3	Carden Alvar	Bob Bowles	(705) 325-3149	bowles @ bconnex.net
4	Oshawa	James Kamstra	(905) 985-4497	jkamstra @ gartnerlee.com
5	Pinery Provincial Park	Brenda Kulon	(519) 869-2833	bkulon@cogeco.ca
6	Orillia	Bob Bowles	(705) 325-3149	bowles @ bconnex.net
7	Toronto T.E.A.	Nancy vander Poorten	(416) 466-9013	nmg.vanderpoorten@sympatico.ca
8	Lake Dore	Chris Michener	(613) 625-2263	cmichener@renc.igs.net
9	Long Point	Chauncey Wood	(519) 426-0039	cwood@kwic.com
10	Severn	Nancy Ironside	(705) 326-4384	nancy.ironside@sympatico.ca
11	Windsor	Paul Pratt	(519) 966-5852	ppratt@city.windsor.on.ca
12	MacGregor Point	Mary Rapati	(519) 832-2494	tony.rapati@sympatico.ca
13	Skunk's Misery	Ann White	(519) 457-6586	dwhite@odyssey.on.ca
14	Sunderland	James Kamstra	(905) 985-4497	jkamstra @ gartnerlee.com
15	Toronto Centre	John Carley	(416) 766-1330	carley.la@sympatico.ca
16	Hog Island	Chris Michener	(613) 625-2263	cmichener@renc.igs.net
17	Haliburton Highlands	Ed Poropat	(705) 457-3018	edporopat@haihinet.on.ca
18	Rondeau Provincial Park	Sandy Dobbyn	(519) 676-0184	sandy.dobbyn@mnr.gov.on.ca
19	Petrogylphs	Jerry Ball	(705) 745-3272	
20	Pelee Island	Bob Bowles	(705) 325-3149	bowles @ bconnex.net
21	Point Pelee National Park	Dan Dufour	(519) 322-5700	dan.dufour@pc.gc.ca

White Admiral at Sunderland, Durham Region July 2002 (Photo: James Kamstra)

Table 2. Butterfly and Skipper totals for each official NABA butterfly count conducted in Ontario in 2002.

SPECIES	1	2	3	4	5	6	7	8	9	10	11
Silver-spotted Skipper				6	3		10	2	65	6	59
Hoary Edge											1
Southern Cloudywing									1		3
Northern Cloudywing			3	12	1	8	4	4	1	2	1
Dreamy Duskywing	22	17		11			2				1
Juvenal's Duskywing	2	16				1					
Columbine Duskywing	4										
Wild Indigo Duskywing											
Com. Checkered Skipper											
Common Sootywing											1
Duskywing species	6	2						4			
Arctic Skipper	1	44		4		4					
Least Skipper			9	16	22	6	10	6	3	4	16
European Skipper		241	55340	1675	2007	2037	819	7630	383	2634	132
Fiery Skipper											
Indian Skipper						1					
Peck's Skipper		2		8	1			10			3
Tawny-edged Skipper		13	18	48	1	16	96	6		1	24
Crossline Skipper					2		1		3		14
Long Dash		60		142	4	3	68	25	2	3	13
Northern Broken-dash				6	6		4		21		123
Little Glassywing					3				7		22
Delaware Skipper					4				3		50
Mulberry Wing											5
Hobomok Skipper		56	7	60	45	8	51	7	4	3	7
Broad-winged Skipper											
Dion Skipper											
Duke's Skipper											
Black Dash											2
Two-spotted Skipper									1		
Dun Skipper		3	1	1					8	2	14
Pepper and Salt Skipper		3									
Common Roadside Skipper	12	13	1		1	1					
Skipper species		24						2			14
Pipevine Swallowtail											1
Black Swallowtail			3	2	11	1					5
Giant Swallowtail											
Eastern Tiger Swallowtail					51		6		62		10
Canadian Tiger Swallowtail	5	199	22	10	2	20		2		4	
Spicebush Swallowtail					7				73		2
Swallowtail species											1
Mustard White	12							5			
Cabbage White		3	5	14	98	20	38	9	42	2	70
Pieris species	1							8			
Olympia Marble	2										
Clouded Sulphur	42	15	5	4	3	4	5	6	46		19
Orange Sulphur		1		2	1		2		12		19
Pink-edged Sulphur	3	3									
Colias species	8	5									
Little Yellow											
Harvester	1	2					1				
American Copper		6		7							
Bronze Copper			9	3	2	3			7	1	
Bog Copper								2			
Dorcas Copper											
Coral Hairstreak					3		1		4	1	15
Acadian Hairstreak								2	1	1	43
Edwards' Hairstreak									10		3
Banded Hairstreak					1				3		5
Hickory Hairstreak									6		3
Striped Hairstreak											

SPECIES	12	13	14	15	16	17	18	19	20	21	total
Silver-spotted Skipper		33		118	3		17			28	350
Hoary Edge											1
Southern Cloudywing		1									5
Northern Cloudywing			1	7	5						49
Dreamy Duskywing					2						16
Juvenal's Duskywing											1
Columbine Duskywing						3		10		3	16
Wild Indigo Duskywing											0
Com. Checkered Skipper											0
Common Sootywing		4							2	4	11
Duskywing species					1						5
Arctic Skipper						1					9
Least Skipper	1	1	161	3		84	43	18	121	169	693
European Skipper	15902	1067	11400	1333	1942	7708	168	207		11	112395
Fiery Skipper							1				1
Indian Skipper											1
Peck's Skipper	1	8	125	1	8	89		9			263
Tawny-edged Skipper	3	12	159	4		14	8	2		1	413
Crossline Skipper	3	1	6	5		3	10	1			49
Long Dash	15	1	289	3	8	107		2			685
Northern Broken-dash	5	27	38	60		10	26	35	cw		361
Little Glassywing		3	3	2			4				44
Delaware Skipper		17	24	12		1		10			121
Mulberry Wing	1					61	1	2			70
Hobomok Skipper	6	5	12	1	2	1	2				221
Broad-winged Skipper		3	20		5	28		373		2	431
Dion Skipper			9				4	2		3	18
Duke's Skipper										6	6
Black Dash		2									4
Two-spotted Skipper			1			18					20
Dun Skipper	4	4	72	33	36	62		327	4		571
Pepper and Salt Skipper											3
C. Roadside Skipper	2										30
Skipper species				14	2	5					61
Pipevine Swallowtail											1
Black Swallowtail		3	1	1			15		77	126	245
Giant Swallowtail							2		59	81	142
Eastern Tiger Swallowtail		96	1	16			71		19	43	376
Can. Tiger Swallowtail	108		47			1		1			421
Spicebush Swallowtail							3		1	110	196
Swallowtail species											1
Mustard White			75			6		12			110
Cabbage White	119	214	245	618	19	63	386	5	2428	1728	6126
Pieris species					10	1					20
Olympia Marble											2
Clouded Sulphur	45	53	78	129	40	274	137	48	22	58	1033
Orange Sulphur	4	56	3	27		2	192		132	285	738
Pink-edged Sulphur						8		1			15
Colias species											13
Little Yellow	.									1	1
Harvester					1						5
American Copper											13
Bronze Copper	2	3	15				1	1		6	53
Bog Copper						2		11			15
Dorcas Copper	1										1
Coral Hairstreak	22	5	19	14		26		5			115
Acadian Hairstreak		2	9	33		37		17			145
Edwards' Hairstreak				1							14
Banded Hairstreak		25	1	11		2		7			55
Hickory Hairstreak		1									10
Striped Hairstreak					1	3		10			14

SPECIES	1	2	3	4	5	6	7	8	9	10	11
Satyrium species											
Brown Elfin	4										
Hoary Elfin	2										
Eastern Pine Elfin	39										
Western Pine Elfin	1										
Callophrys species	2										
Juniper Hairstreak											
Grey Hairstreak	8										
Eastern Tailed Blue					2				11		6
Spring Azure	74	8									
Summer Azure		6		1	33	2	1		8		2
Silvery Blue	97	19	28	8		1	7	1			
Blue species	21	4									
American Snout											
Variegated Fritillary											
Great Spangled Fritillary				3	32	1	12	2	17	4	57
Aphrodite Fritillary											
Atlantis Fritillary		10						1			
Speyeria species											
Silver-bordered Fritillary		80		8		1					
Meadow Fritillary	2				14						
Silvery Checkerspot		10	2		23				6		9
Harris' Checkerspot		45								2	
Pearl Crescent				24	24	3	2		2		
Northern Crescent		2	65	366	4	72	72	42	169	42	3
Tawny Crescent			1		3						
Crescent species											3
Baltimore Checkerspot			235			19	24		13		17
Question Mark			2	1	7		1	1	2		2
Eastern Comma	2	1		2	3					2	1
Green Comma	2										
Grey Comma	5		1								
Polygonia species	7	1		1							
Compton Tortoiseshell											
Mourning Cloak	7	2	8	4	3	1	3			1	7
Milbert's Tortoiseshell										1	
American Lady	9	2		1					1		3
Painted Lady					1						
Red Admiral			1	1	9		2		19		2
Vanessa species											
Common Buckeye			1								
White Admiral		247	149	99		40	16	27		25	
Red-spotted Purple			1	9	56		2		6		1
Viceroy		1	11	33	10	6	6	2	5	1	10
Hackberry Emperor											
Tawny Emperor											
Northern Pearly-Eye			1	9	2	1	17	1	5	14	14
Eyed Brown		3	6	64	6	6		20	31	42	46
Appalachian Brown				2			1		1	2	23
Little Wood-Satyr		113	6	186	652	8	199	6	22	8	116
Common Ringlet		217	218	614	4	122	193	4	1	1	
Common Wood-Nymph				1					3		136
Chryxus Arctic	24										
Satyrodes species		1									
Monarch	1	11	8	8	18	5	5	11	5	3	13
Total Invididuals	429	1513	56170	3480	3190	2427	1688	7856	1104	2822	1183
Total Species	26	35	29	39	31	30	32	26	31	20	50
Date	JN01	JN29	JN29	JN29	JN29	JN30	JY01	JY06	JY06	JY06	JY06
Observers	16	36	8	10	25	10	15	8	8	8	24

SPECIES	12	13	14	15	16	17	18	19	20	21	total
Satyrium species				1							1
Brown Elfin											4
Hoary Elfin											2
Eastern Pine Elfin											39
Western Pine Elfin											1
Callophrys species											2
Juniper Hairstreak									1		1
Grey Hairstreak								1		2	11
Eastern Tailed Blue		11	3	79			1		5	18	136
Spring Azure											82
Summer Azure	6	8	16	6		7	25	4	133	99	357
Silvery Blue	1		2								164
Blue species					1						26
American Snout							4		56	8	68
Variegated Fritillary									3		3
Great Spangled Fritillary	37	49	27		7	28	7	18			301
Aphrodite Fritillary	1				2	9		2			14
Atlantis Fritillary					6	5		3			25
Speyeria species					11	6					17
Silver-bordered Fritillary			35		1	23					148
Meadow Fritillary	5	9	3		2	26					61
Silvery Checkerspot		7		2							59
Harris' Checkerspot											47
Pearl Crescent	13	14	31	17		4	30	57	8	99	328
Northern Crescent	275	38	322	2	43	87	43	4	4	338	1993
Tawny Crescent											4
Crescent species				1						68	72
Baltimore Checkerspot	120		184			36					648
Question Mark	4	1	3	11		5	20		19	15	94
Eastern Comma		3	6			9	2	8	11	14	64
Green Comma						1					3
Grey Comma			6			5		4	1	1	23
Polygonia species			1								10
Compton Tortoiseshell						24		8			32
Mourning Cloak	4	4	10	13	1	2	2	6	2	3	83
Milbert's Tortoiseshell	3										4
American Lady	1		1	1			1				20
Painted Lady		2					2			2	7
Red Admiral	1	9		12			19		13	21	109
Vanessa species										3	3
Common Buckeye									4	8	13
White Admiral	20		43	2	15	179		33			895
Red-spotted Purple	2	1	3	2					104	24	211
Viceroy	28	3	20	2		14	10	1	36	116	315
Hackberry Emperor									27	6	33
Tawny Emperor		1							26	10	37
Northern Pearly Eye	22	2	22		4	7	18	3			142
Eyed Brown	71		459		13	483	1	32			1283
Appalachian Brown	1	4	15			1	17				67
Little Wood-Satyr	39	204	22	265	9	4	223	1			2083
Common Ringlet	32		99			10		3			1518
Common Wood-Nymph		22	28	17	134	48	76	21	9	6	501
Chryxus Arctic											24
Satyrodes species					1					1	3
Monarch	71	14	25	32	3	49	81	21	87	207	678
Total Invidlduals	17013	2066	14214	2926	2354	9709	1691	1365	3434	3755	140389
Total Species	39	31	49	36	27	50	28	31	27	37	
Date	JY06	JY07	JY07	JY13	JY13	JY13	JY20	JY20	AU03	AU10	
Observers	26	23	22	24	4	12	25	6	8	38	356

RECENT COLONIZERS IN TORONTO: A SOUTHERNER AND A NORTHERNER

by Bob Yukich

Wild Indigo Duskywing (*Erynnis baptisiae*)

In 1998 a few Wild Indigo Duskywings were first discovered in Toronto along the Scarborough Bluffs in the east end of the city. This species has been expanding its range northward in the eastern U.S., following plantings of its adopted hostplant, the exotic Crown Vetch (*Coronilla varia*), along highway corridors. Since its appearance in Toronto, Wild Indigo Duskywing has colonized the Rouge Valley, and in 2002 it extended its range into the West End of the city with a new colony in the Humber Valley, where Crown Vetch is plentiful. I noted three distinct broods here during the breeding season, with a peak one-day count of 27 individuals in late July.

Silvery Blue (*Glaucopsyche lygdamus*)

In 1998 Silvery Blues were first reported for the city near the Toronto Zoo, likely having arrived here from the north via the Rouge Valley. It is known that this species has been undergoing a southward range extension. Silvery Blues have subsequently appeared along the eastern Toronto waterfront in areas such as Scarborough Bluffs and the Leslie St. Spit. A huge colony is now centred on the sailing clubs just east of Cherry Beach, where its commonly used host plant, the non-native Cow Vetch (*Vicia cracca*), is abundant. I had a high count of 172 individuals at this location on 15 June 2001. This year I discovered a small colony of Silvery Blues in the Humber Valley, the first ones to my knowledge, for the West End of the city. On the same day I also observed a single individual flying west along railway tracks about 2 km. south of this location.

Both Wild Indigo Duskywings and Silvery Blues utilize hostplants that are common in southern Ontario, and both species could eventually become widespread in this part of the province.

Editor's Note:

Shapiro (1979) documented the utilization of Crown Vetch by Wild Indigo Duskywing in Pennsylvania and the spread of this skipper into areas where Crown Vetch existed. He also suggested that ongoing monitoring of the range and population levels of Wild Indigo Duskywing where Crown Vetch occurs would be desirable. In Ontario, surveying patches of Crown Vetch along highway embankments and roadsides will help to document the spread of this species here.

References

Shapiro, A.M. 1979. Erynnis baptisiae (Hesperiidae) on Crown Vetch (Leguminosae). Journal of the Lepidopterists' Society 33(4): 258.

SUMMARY OF ONTARIO BUTTERFLIES AND SKIPPERS IN 2002

Compiled by Colin D. Jones

Introduction

The following is a summary of the butterflies and skippers reported in Ontario in 2002. For each species, the earliest and latest records (that were submitted) are featured, as well as other noteworthy records to include: a) new information on range and new occurrence localities; b) data, when submitted, on flight periods, broods and population monitoring; c) life history data that is not well known or seldom reported including foodplants, nectar sources, larval description and habits, ovipositing data and behaviour, pupal description and siting, adult habits, predation, etc., and; d) records of rare or seldom reported species.

Unlike previous summaries, only those species for which there were reports from 2002 are listed, thus saving a considerable amount of space and greatly reducing the number of pages that are required to be printed. The listing of superfamilies, subfamilies and genera, as well as taxon authors have been eliminated from this portion of the summary and has been replaced by a *Checklist to the Butterflies of Ontario* at the end of the butterfly section (see page 49). Counties, districts and regional municipalities (as listed on pages 4 and 5) in the text are truncated and printed in *italics* (e.g. Regional Municipality of Waterloo appears as *Waterloo*).

The full set of the 3440 records (comprising 125 species) submitted from 2002 is included as a table in a PDF file found on the CD accompanying this issue of *Ontario Lepidoptera*. Also featured in a separate table are 520 records from 2001 that were not featured in the summary from that year. Records within these tables are sorted taxonomically by species, then by county (alphabetically), and then by date.

The PDF file (Portable Document Format) on the CD can be opened using Adobe Acrobat Reader, which comes pre-installed on most computers, and is also available as a free download at http://www.adobe.com/support/downloads/main.html. The table can be searched in a limited way using the *Find* function in Acrobat Reader. Additional PDF files including keys to observer's initials, county codes and numbers codes are also included on the CD. For TEA members without access to a computer or printer, a print-out of the butterfly and skipper tables can be requested from Colin Jones (co-editor, *Ontario Lepidoptera*).

Each record within the tables includes data on county, locality, date, observers, numbers seen, and any special notes. Other valuable data that could not be included in the tables due to space limitations, such as georeferencing (UTM or Lat/Long) information, is retained in the TEA's Ontario Butterfly Atlas Database, which is housed at and maintained by the Natural Heritage Information Centre, Ministry of Natural Resources, in Peterborough. Further inquiries or requests for information can be directed to the compiler.

Both the species accounts and the butterfly checklist are organized in accordance with Layberry *et al.* (1998) with some taxonomic updates from Opler and Warren (2003). The common names follow Layberry *et al.* (1998).

Data has been carefully checked by the compiler and every effort has been made to verify records for provincially rare and unusual species, as well as species in some particularly difficult groups. However, the majority of records are unverified reports and occasional identification errors may remain. Any corrections brought to the compiler's attention will be published in future issues of *Ontario Lepidoptera*.

The 2002 Season

The first butterfly of the season was a **Mourning Cloak** at Point Pelee National Park on February 25. The main start to the season began, however, when unseasonably warm weather in late April caused many butterflies to emerge. By the third week of April, temperatures approached 30∞C across southern Ontario! Not only did these temperatures cause the emergence of species that over-winter as adults, but also the early emergence of species that over-winter in the pupal stage such as **Eastern Pine Elfin**, **Spring Azure** and **Cabbage White**. The weather turned unseasonably cold in May, however, and remained cool for a prolonged period. This cold period apparently resulted in low numbers of most species through spring and early summer, even though by June the weather was above average. The prolonged cold period probably caused the die-off of butterflies that had either already emerged as adults or that had initiated their development from the pupal stage due to the warm weather in April.

The remainder of the season was closer to average as far as weather was concerned, although August and September were a little cooler than normal. Not cool enough, however, to have a negative effect on butterflies and overall numbers were relatively good for many mid to late summer species, as well as second broods.

Fiery Skipper migrants continue to successfully reach the Toronto area, where they became quite common by mid-September. Also in Toronto, the **Wild Indigo Duskywing** continues to establish itself (see details on page 18). A record of **Wild Indigo Duskywing** from north Whitby suggests that this species may be further expanding its range in Ontario and observers should be on the look-out for this species elsewhere.

Unlike the past few years, there was no major influx of migrant **Red Admirals** or **American Ladies** in 2002. Although in the early part of the season **Common Buckeyes** were nearly absent, by August they had become quite numerous throughout southwestern Ontario, as far north as Toronto, with additional records extending as far as Ottawa and Thunder Bay. **Monarchs** had a very good year for breeding and development in Ontario with thousands being seen at Point Pelee in early October.

A **Funereal Duskywing** photographed at Humber Bay Park by Don Peuremaki on October 6 represents the 6th Ontario record of this rare vagrant.

The second week of November was unseasonably warm, which prolonged the flight period of many species – a total of 11 species of butterflies were reported during the month of November! Our last reports of the season are from November 20, when both **Clouded Sulphur** and **Mourning Cloak** were seen in Toronto.

Family: **HESPERIIDAE**

Epargyreus clarus SILVER-SPOTTED SKIPPER

In 2002 – First noted on June 10 at Sandbanks P.P., *Prince Edward* (JD). An incredible 134 were noted on the Toronto Islands, *Metro Toronto* on July 21 (RJY). Last noted on September 10 when a fairly fresh individual, obviously of a second brood, was nectaring on *Verbena* at McLean Park, Scarborough, *Metro Toronto* (BH).

Thorybes bathyllus SOUTHERN CLOUDYWING

In 2002 – Two records: Twelve were noted at Long Point, *Norfolk* on June 23 (RJY) and one was sighted on July 7 at Skunks Misery, *Middlesex* (AWh, GP).

Thorybes pylades NORTHERN CLOUDYWING

In 2002 - First noted on June 1 when two were at Pinery P.P., *Lambton* (RJY). Considered rare in Algonquin P.P., several from June 19-21 at Kiosk and Daventry (*Nipissing*) in the northern part of the park were considered noteworthy (APP). The latest record this year was on July 29 when a very worn individual was noted at the Eglinton Flats, *Metro Toronto* (RJY).

Erynnis icelus DREAMY DUSKYWING

In 2002 – First noted on May 22 in the Twin Lakes area, *Peterborough* (JB). A total of 17 were recorded on July 5 during the Algonquin Park Highway 60 Butterfly Count (m.obs.) indicating that they probably flew beyond this already rather late date.

Erynnis brizo SLEEPY DUSKYWING

In 2002 – The only record of the year is of a single male noted on June 1 at Pinery P.P., *Lambton* (RJY).

Erynnis juvenalis JUVENAL'S DUSKYWING

In 2002 – A fresh individual on May 4 at Point Pelee N.P., *Essex* (RZD) represents the first record of the year. A total of 16 were recorded on July 5 during the Algonquin Park Highway 60 Butterfly Count (m. obs.) indicating that they probably flew beyond this already rather late date.

Erynnis funeralis FUNEREAL DUSKYWING

In 2002 – An individual was photographed on October 6 at Humber Bay Park, *Metro Toronto* (DP). This represents the sixth record of this extremely rare vagrant to Ontario.

Erynnis lucilius COLUMBINE DUSKYWING

In 2002 – The first generation was recorded from May 22, Petroglyphs P.P., *Peterborough* (DBr) to June 25, Algonquin P.P. (CDJ, DAS, WJC). The second generation was recorded from July 15 to August 20, both records from the Petroglyphs P.P. (DBr). A single recorded on July 27 along the Cameron Lake Rd., Algonquin P.P. (MB, JKl, DT) represents a new late date for Algonquin. A probable third generation (heretofore not noted in Ontario) was reported resulting from several mid-September records and an incredible October 1 record from the Carden Plain, *Victoria* (DP).

Erynnis baptisiae WILD INDIGO DUSKYWING

In 2002 – There were many records this year from *Metro Toronto* as follows: The first generation was noted from May 28 (one nectaring on Chokecherry (*Prunus virginiana*)) to June 11, both from the Eglinton Flats (RJY). Second generation records were from: Eglinton Flats July 23-29 (RJY); High Park August 1 (RJY); Tommy Thompson Park August 4-6 (CSAM, CH); and individuals on September 9 and 17 along a railway in downtown Toronto (JPC). Third generation records include eight on September 22 (RJY), six on September 24 (CSAM) and one worn individual on October 2 (RJY) at Eglinton Flats, as well as two on September 26 (CSAM) and one on October 3 (BH) at Rouge Park. A record of three on September 23 from Heber Down C.A., *Durham* is noteworthy (DBa). Elsewhere in Ontario, this species was recorded at the following two sites: Spring Garden Prairie, Windsor, *Essex* on September 2 (TH); a colony east of London at Highways 73 and 401, *Middlesex* (DAM, AWh).

Erynnis persius borealis "BOREAL" PERSIUS DUSKYWING

In 2002 – On July 8 a single specimen was collected at Peawanuk, Winisk River in northern *Kenora* (DAS).

Pholisora catullus COMMON SOOTYWING

In 2002 – There are five records from this year beginning with a single at Long Point, *Norfolk* on June 23 (RJY), four during the Skunks Misery Butterfly Count, *Middlesex* on July 7 (m. obs.), four during the Point Pelee Butterfly Count, *Essex* on August 10, one on August 30 at Point Pelee N.P., *Essex* (AW), and finally one on September 1 east of London at Highways 73 and 401, *Middlesex* (AWh, GP).

Carterocephalus palaemon mandon ARCTIC SKIPPER

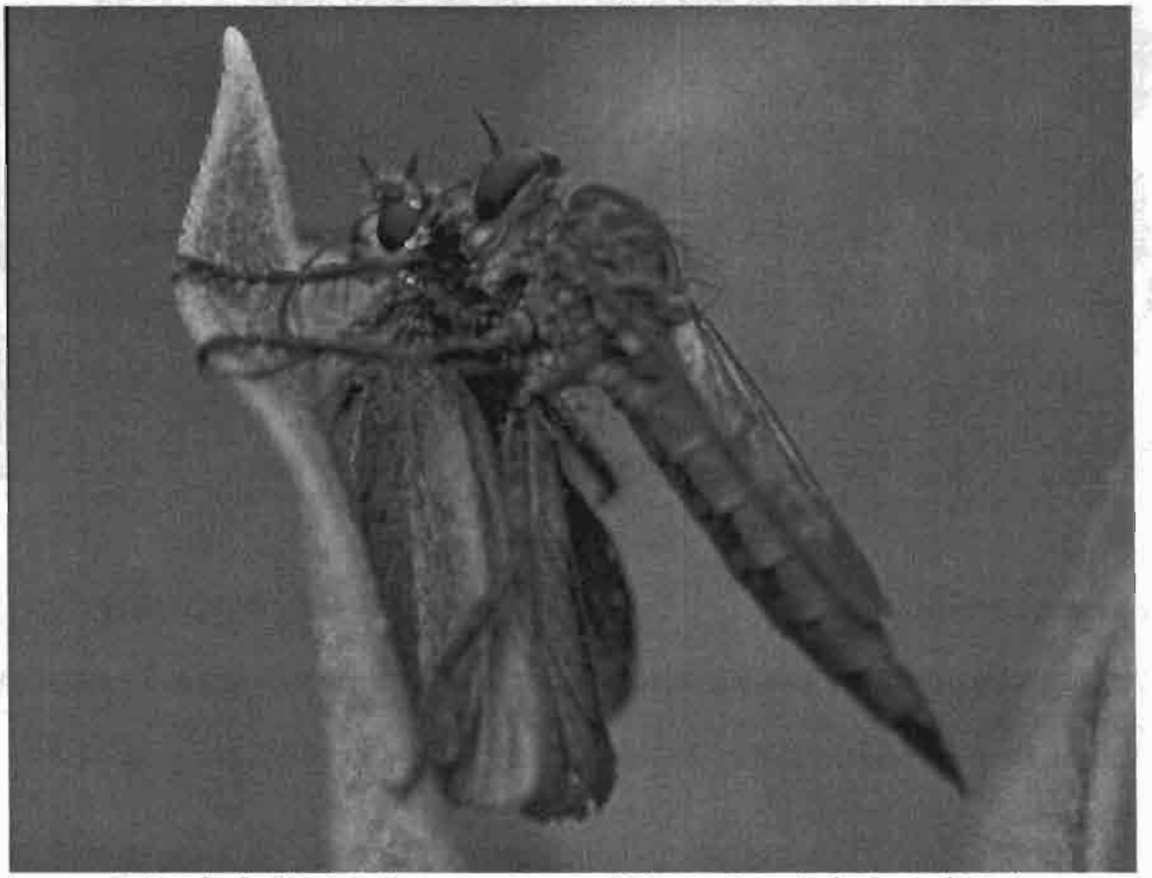
In 2002 – First reported on June 1 when a single was noted on the Algonquin Park East Side Butterfly Count, *Nipissing* (CM, JBr, EA). The last record was a very worn individual 5 km NE of Kinmount, *Haliburton* on July 13 (JK).

Ancyloxypha numitor LEAST SKIPPER

In 2002 – First reported on June 17 from Spottiswood Lakes, *Brant* (CDJ, PSB). As there are relatively few records of this species from the north, a total of 50 on July 12 at Mission Island, Thunder Bay, *Thunder Bay* is noteworthy (NGE). There were several records beyond mid-September this year including one of September 15 at DuMarsh Rd., near North Bruce, *Bruce* (TRa,MRa), and reports from *Metro Toronto* on September 24 and 30 (CSAM). Finally there were two October records: one fairly fresh individual was at Eglinton Flats, *Metro Toronto* on October 2 (RJY) and three were noted on October 3 along DeLaurier Trail, Point Pelee N.P., *Essex* (KAM, RLW).

Thymelicus lineola EUROPEAN SKIPPER

In 2002 – This year's first record was not until June 21 from Trent University, *Peterborough* (JB). An interesting observation of many stuck in mud and at least a hundred lying in pools of water came from the railtrail at Blindline, Saugeen Twp., *Bruce* on July 1 (TRa, MRa). The latest records of this normally single-brooded species, are two records of second brood individuals from Point Pelee N.P., *Essex*. On August 17, one was at the DeLaurier Fields (CSAM, BR), and on August 17 and 18, individuals were noted at the Visitor Centre (CSAM, BR).



Robber fly (Asilidae) feeding upon a European Skipper at Petroglyphs Provincial Park, Peterborough Co.on 8 July 2002 (Photo: David Bree)

Hylephila phyleus FIERY SKIPPER

In 2002 – While in the past, this species has only been a regular migrant to southwestern Ontario, it now appears to be regular as far north as *Metro Toronto*. The first immigrant was a male reported from James Gardens, *Metro Toronto* on July 29 (RJY). The next was not reported until August 27 from Humber Bay, *Metro Toronto* (RJY). A pair *in copula* were photographed at High Park, *Metro Toronto* on September 4 (CH). Seen almost daily from mid-September until October 15, when the last individuals were noted at High Park (RJY). The only other reports received this year were from Point Pelee (September 2-October 12) and Pelee Island, *Essex* on September 21 (JK).

Fiery Skipper pair in copula at High Park, Metro Toronto on 4 September 2002 (Photo: Carol Horner).

Hesperia comma laurentina COMMON BRANDED SKIPPER

In 2002 – Dates this of this rarely reported but not uncommon species within its range, extended from August 1 at the Sunday Lake Road, Algonquin P.P. (MB, CPR, TL) to August 25 at the Trailer Sanitary Station, Hwy 60, Algonquin P.P. (JJD) *Nipissing*.

Hesperia leonardus LEONARD'S SKIPPER

In 2002 – A record from Sandbanks P.P., *Prince Edward* on July 17 seems early (SPP), especially in what was otherwise a delayed season. Our next record is from Deer Run Fields, MacGregor Point P.P., *Bruce* when two were recorded on August 5 (TRa, MRa). One was nectaring on Canada Goldenrod (*Solidago canadensis*) on August 23 at Petroglyphs P.P., *Peterborough* (DBr). Finally, the last noted were two in the Lake Travers area of Algonquin P.P., *Nipissing* on August 31 (JJD, CPR, AH).

Hesperia sassacus INDIAN SKIPPER

In 2002 – First noted on June 13 when a small colony was discovered in Ajax, *Durham*. Individuals were noted here again on June 20 and 27 (BH, JF), the latter date representing the last record of the year.

Polites peckius PECK'S SKIPPER

In 2002 – First recorded at Sunningdale, London, *Middlesex* on June 19 (DAM). There were several records throughout August this year as well as three September records. One was found at Komoka P.P., *Middlesex* and another at Skunk's Misery, *Middlesex* on September 1 (AWh, SP). On September 10, two were noted at Crediton Parkway, *Peel* (CR).

Polites themistocles TAWNY-EDGED SKIPPER

In 2002 – On June 6, the first of the year were noted 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL). Quite a few records from several locations in *Bruce* from late July to August are noteworthy (TRa, MRa) as is a September 13 record of two fresh individuals from Courtice, *Durham* (JK).

Polites origenes CROSSLINE SKIPPER

In 2002 – The first report is from the Eglinton Flats, *Metro Toronto* on June 25 (RJY). Records from *Bruce* on July 6 (North Bruce) and July 16 (MacGregor Point P.P., Deer Run Trail) are noteworthy (TRa, MRa) Our last report is of six from the Toronto Islands, *Metro Toronto* on July 21 (RJY).

Polites mystic LONG DASH SKIPPER

In 2002 – One at Deer Run Fields, MacGregor Point P.P., *Bruce* on June 17 marks the first record of the year (TRa, MRa). Late records come from Dufferin Quarry, Milton, *Halton* on August 2 (IM) and Deer Run Trail, MacGregor Point P.P. on August 11 (TRa, MRa).

Wallengrenia egeremet NORTHERN BROKEN-DASH

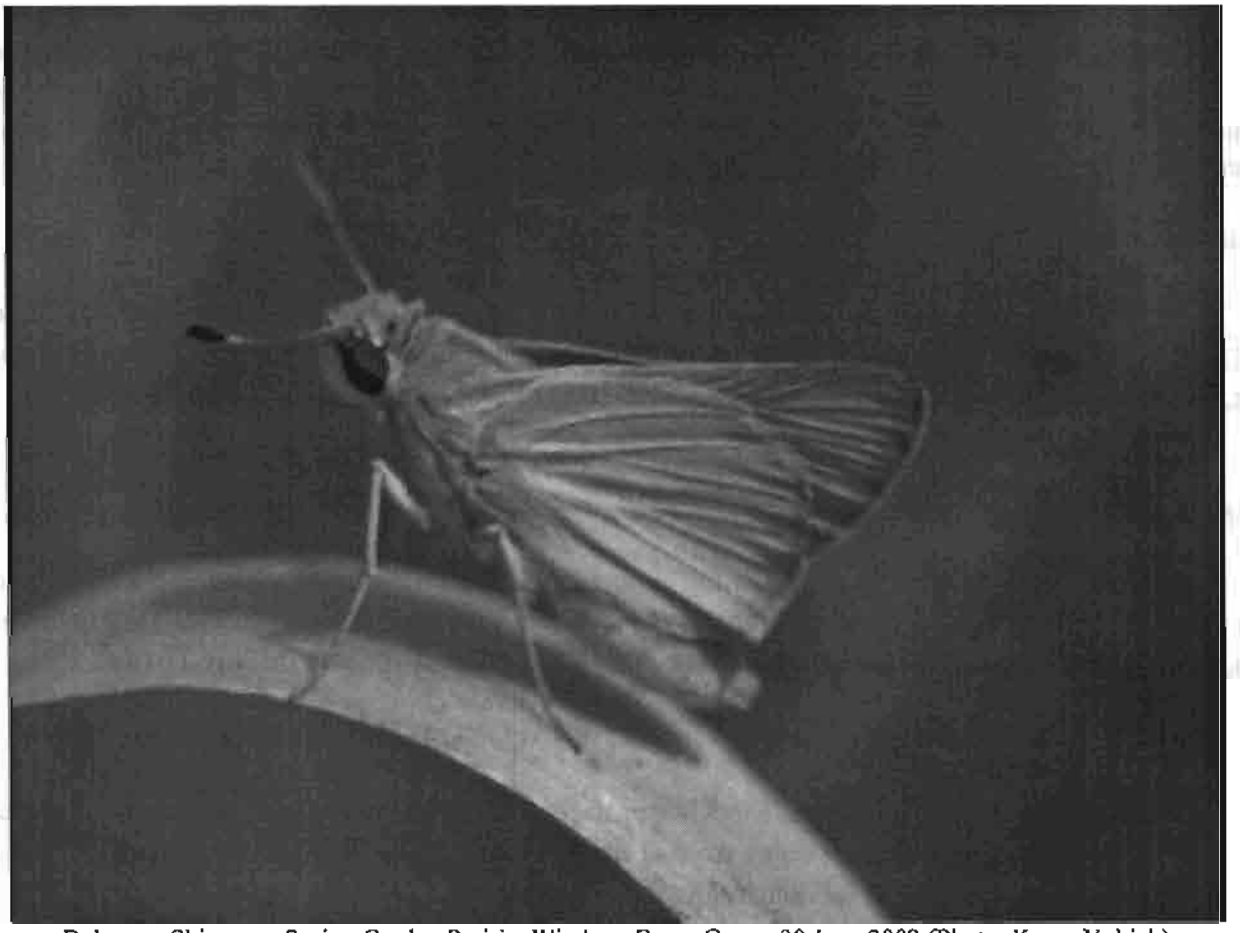
In 2002 – A handful of records the extremes of which are July 3 in the North Thames Valley, London, Middlesex Co. (GP) and August 11 at MacGregor Point P.P., Deer Run Trail, Bruce Co. (TRa, MRa).

Pompeius verna LITTLE GLASSYWING

In 2002 – First noted on June 29 when three were recorded during the Pinery P.P. Butterfly Count (m.obs.). Three recorded during the Sunderland Butterfly Count, *Durham* on July 7 are noteworthy; individuals were recorded during this count near Wilfred (JK), Udora (DBi) and Blackwater (DC). One at Kilbride Creek and the Bruce Trail, *Halton* on July 24 is our last record (IM).

Anatrytone logan DELAWARE SKIPPER

In 2002 –First noted on June 29 during the Pinery P.P. Butterfly Count (m.obs.). Demonstrating that this species is expanding its range northward, a record 5km NE of Kinmount, *Haliburton* during the Haliburton Butterfly Count is noteworthy (JK) as are records on July 14 from Grantley, *Stormont, Dundas and Glengary* (TH) and August 10 (our last record) from Ridge Road (Mer Bleue), *Ottawa-Carleton* (TH).



Delaware Skipper at Spring Garden Prairie, Windsor, Essex Co. on 30 June 2002 (Photo: Karen Yukich).

Poanes massasoit MULBERRY WING

In 2002 – First recorded on July 5 at Petroglyphs P.P., *Peterborough* (DBr). An incredible total of 61 were recorded during the Haliburton Butterfly Count, *Haliburton* (m.obs.) indicating that this species is not uncommon in appropriate habitat in that area. Also noteworthy are records from two locations in *Bruce* – single individuals were found along Tie Road, Baie du Dore on July 6 and 14 as well as at the MacGregor Point P.P. Ski Trail on July 21 and 27 (TRa, MRa).

Poanes hobomok HOBOMOK SKIPPER

In 2002 – Due to the cold spring, our first records were not until June 2 from Limehouse C.A. and the Esquesing Bruce Side Trail, *Halton* (IM). Reported nearly daily through the first week of July. Last reported on July 21 when a very worn female was found on the Toronto Islands, *Metro Toronto* (RJY).

Poanes viator BROAD-WINGED SKIPPER

In 2002 – The first record of the year was of three at Skunk's Misery, *Middlesex* recorded during the Skunk's Misery Butterfly Count (AWh, GP). An impressive total of 323 were tallied (mostly in the Twin Lakes area) during the Petroglyphs Butterfly Count, *Peterborough* (m.obs.). On August 10, two were noted during the Point Pelee Butterfly Count, *Essex* (m.obs.) representing the last record of the year.

Euphyes dion DION SKIPPER

In 2002 – First noted on July 7 when nine were counted during the Sunderland Butterfly Count, *Durham* (m.obs.). Other noteworthy records include 33 at Swift Rapids Rd., Severn, *Simcoe* (MH), four on July 20 during the Rondeau P.P. Butterfly Count, *Chatham-Kent* (m.obs.), and our latest record of the year on August 10 when three were noted during the Point Pelee Butterfly Count, *Essex* (m.obs.)

Euphyes dukesi DUKES' SKIPPER

In 2002 – Our only records of the year are of one along the Woodland Nature Trail, Point Pelee N.P., *Essex* on August 8 (BP) and a total of six recorded during the Point Pelee Butterfly Count, *Essex* on August 10 (m.obs.).

Euphyes conspicua BLACK DASH

In 2002 – Two during the Windsor Butterfly Count, *Essex* (m.obs.), two on July 7 at Concession Rd., Newbury, *Middlesex* during the Skunk's Misery Butterfly Count (AWh, GP) and three at the Roberstson Tract, *Halton* on July 25 (IM) represent the only three records of the year.

Euphyes bimacula TWO-SPOTTED SKIPPER

In 2002 – On June 28 a total of 15 were counted in the Sandy Lake Rd. area near Twin Lakes, *Peterborough* (JB). One was on Concession 13, Mara Twp., *Simcoe* on July 6 (IM). On Manitoulin Island, *Manitoulin* one was collected at Michael's Bay on July 17 (CDJ). Lastly, this species was present at a fen south of Scugog Lake, *Bruce* on July 22 (CDJ).

Euphyes vestris metacomet DUN SKIPPER

In 2002 – The first record is of one on June 23 from Petroglyphs P.P., *Peterborough* (DBr). The last report is from the MacGregor Point P.P. Ski Trail, *Bruce* on August 17 (TRa, MRa).

Atrytonopsis hianna DUSTED SKIPPER

In 2002 – Reported twice this year from its usual locations in *Lambton*. A total of 35 were recorded at Ipperwash and 23 at The Pinery P.P. on June 2 (RJY).

Amblyscirtes hegon PEPPER AND SALT SKIPPER

In 2002 – In Algonquin P.P., where they are normally more commonly recorded, the only record this year was during the Algonquin Hwy 60 Butterfly Count on July 5 when a total of three were tallied (m.obs.) Our only other record is of one on July 7 along the Galway-Cavendish Forest Access Rd., *Peterborough* (JB).

Amblyscirtes vialis COMMON ROADSIDE SKIPPER

In 2002 – First recorded on May 31 with three at Ipperwash, *Lambton* (RJY). Our last report is from July 7, during the Algonqun Hwy 60 Butterfly Count, when a total of 13 were counted indicating that the season was not quite over (m.obs.)

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Family **PAPILIONIDAE**

Battus philenor PIPEVINE SWALLOWTAIL

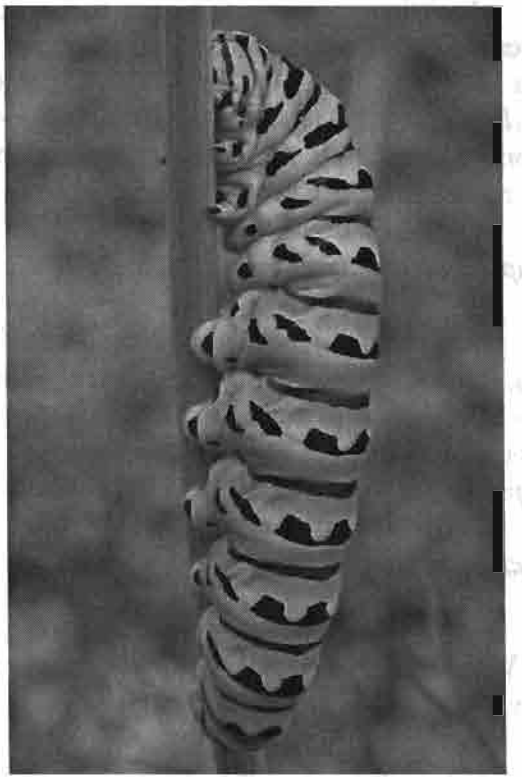
In 2002 – Only three records of this immigrant this year. On June 29, one was found at the DeLaurier Fields, Point Pelee N.P., *Essex* (RJY, KRY). An individual was found during the Windsor Butterfly Count, *Essex* on July 6. Finally, one was photographed at the Toronto Islands, *Metro Toronto* on September 28 (VH).

Eurytides marcellus ZEBRA SWALLOWTAIL

In 2002 – Only one record – A single individual was seen well at Ridgetown, Kent Co. on June 26 (SC).

Papilio polyxenes asterias BLACK SWALLOWTAIL

In 2002 – Several observers noted a late and diminished first brood due to the cool spring. Records of the first brood spanned May 16, Komoka P.P., *Middlesex* (DAM) to July 1, Concession 12 at Sideroad 30, *Bruce* (TRa, MRa). The second brood appeared to be more normal with records beginning on July 17, Sandbanks P.P., *Prince Edward* (SPP). Larvae found feeding on dill at Round Lake Centre, *Renfrew* (JJD) is noteworthy. A record from Parry Sound, *Parry Sound* on September 2 is of interest (CSAM). Several late season records include one at Long Point P.P., *Norfolk* on September 21 (CSAM), and from *Metro Toronoto*, one on September 24 (BH), another at Colonel Samual Smith Park, on September 25 (RJY) and finally a single on October 2 (CSAM).



Black Swallowtail larva on dill.
24 August 2002, Round Lake Centre, Renfrew Co.
(Photo: Jason Dombroskie).

Papilio cresphontes GIANT SWALLOWTAIL

In 2002 – One seen at Point Pelee N.P., *Essex*, on June 10 (DRJD) is the first record of the year, and a rather late one at that. Other locations include Skunks Misery, *Middlesex* on July 3 (PAR) and again on September 1 (AWh, SP), Bear Cr. at Wilkesport, *Lambton* on August 23 (CDJ, PSB), and Oakville, *Halton* on September 7 (DD). A stray was found at Cranberry Marsh, *Durham* on August 21 (SPe). The final record of the year was one at Point Pelee N.P. on September 19 (HTO), possibly from a partial third brood.

Papilio glaucus/canadensis TIGER SWALLOWTAIL SP.

Separating the following two taxa in the field is very challenging. In general, any tiger swallowtail from the southern edge of the Canadian Shield northward is probably a Canadian Tiger Swallowtail. Any tiger swallowtail within the Carolinian zone (southwestern Ontario) will almost certainly be an Eastern Tiger Swallowtail. In the transition zone, however, including the Bruce Peninsula and possibly Manitoulin Island, a tiger swallowtail encountered could be either taxon. Although some field guides provide field marks to distinguish the two taxa, these field marks are variable. This, combined with the fact that within the transition zone, hybridization apparently occurs, makes separating them in the field extremely challenging and problematic. The exception to this is that only Eastern Tiger Swallowtails are double-brooded, and so a tiger swallowtail encountered during the timing of the second brood (usually mid-July through August) should be an Eastern.

Papilio glaucus EASTERN TIGER SWALLOWTAIL

In 2002 – Surprisingly, our first report did not come until June 12 when this species was noted at Glenora Rd., London, *Middlesex* (GP). A tiny individual (about one-half size) was noted on July 26 at Du Marsh Rd., *Bruce* (TRa, MRa). Other second brood individuals within the transition zone came from *Halton* (IM), *Peterborough* (JB), *Durham* (CSAM), and *Bruce* (TRa, MRa). A fairly fresh individual from Humber Bay, *Metro Toronto,* on September 9 was rather late (RJY) but not as late as a September 20 record of a very tattered specimen from MacGregor Point P.P., *Bruce* (TRa).

Papilio canadensis CANADIAN TIGER SWALLOWTAIL

In 2002 – First noted on May 28 at Van Sickle Rd. (1), Devil's 4-mile Rd. (1), and Sandy Lake Rd. (2), *Peterborough* (JB). Although within the range of this species, a record of two fresh individuals 1 km N of Peawanuk in northern *Kenora* (DAS, WJC, MEP) is noteworthy due to the paucity of records from this undersurveyed part of the province. The last record came from Basin Depot, Algonquin P.P., *Nipissing* on July 10 (WKG, MB, CPR).

Papilio troilus SPICEBUSH SWALLOWTAIL

In 2002 – The first report of the year was not until June 20 from Skunks Misery, *Middlesex* (AWh). A record from High Park, *Metro Toronto* on August 26 is noteworthy (CSAM). Finally a very late individual was recorded at Point Pelee N.P., *Essex* on October 12 (HTO).

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Family **PIERIDAE**

Pontia protodice CHECKERED WHITE

In 2002 – The only record reported this year is of one male on August 3 at Nellie Lake, *Cochrane* (RJY).

Pieris oleracea MUSTARD WHITE

In 2002 – First noted on May 5 when three were found 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL). Coincidentally, our last record also comes from the same location on September 10, when two were caught (RAL).

Pieris virginiensis WEST VIRGINIA WHITE

In 2002 – Three records this year all from known locations. On April 27, four were noted at the Halton Regional Forest, *Halton* (RJY). On May 5, a single was found at the Hardy Tract of the Halton Region Conservation Authority, *Halton* (WDM). Finally, three were noted on May 23 on the Galway-Cavendish Forest Access Rd., *Peterborough* (JB).

Pieris rapae CABBAGE WHITE

In 2002 – First reported on April 17 when a couple were found in Bloomfield, *Prince Edward* (DBr). A November 8 record from Humber Bay, *Metro Toronto* (RJY, CSAM) is extremely late.

Euchloe ausonides LARGE MARBLE

In 2002 – A single record of this Western species comes from Ouimet, *Thunder Bay* on June 8 when eight were seen (NGE).

Euchloe olympia OLYMPIA MARBLE

In 2002 – First recorded on May 22 at Twin Lakes, *Peterborough* when a total of 36 were counted (JB). A day later, a few were found nearby at Petroglyphs P.P., *Peterborough* with another on May 25, (DBr). At Constance Bay, *Ottawa-Carleton* one was caught on May 25 and a few ova were found on Spreading Rock-cress (*Arabis divaricarpa*) on June 2 (RAL). Rare in Algonquin P.P., a single individual found along the hydrocut northeast of Grand Lake, *Nipissing* during the Algonquin Park East Side Butterfly Count, was a significant find (JAS). Finally, one was noted on June 9 at the Carden Plain, *Victoria* (RJY).

Olympia Marble at Petroglyphs Provincial Park, Peterborough Co. on 23 May 2002 (Photo: David Bree).

Colias philodice CLOUDED SULPHUR

In 2002 – The first brood was delayed in emerging and our first record was not until May 22 when four were seen in Milton, *Halton* (IM). Numbers increased through the summer, however, and several observers reported higher numbers than usual. There were several November records from *Metro Toronto* with the last on the 20th (BH).

Colias eurytheme ORANGE SULPHUR

In 2002 – First noted on May 22 when a fairly fresh, small, deep-orange individual was spotted at Eglinton Flats, *Metro Toronto* (RJY). Our last record is also from *Metro Toronto*, with a total of 13 recorded at the Leslie St. Spit on November 9 (CSAM, RJY).

Colias gigantea GIANT SULPHUR

In 2002 – Two records, both from the Hudson Bay Lowlands in northern *Kenora*. One was collected on July 6, 1 km N of Peawanuk (DAS, WJC, MEP) and another two were collected on July 11 at Burntpoint Creek, approximately 34 km S of Hudson Bay (DAS, WJC, MEO, MEP).

Colias interior PINK-EDGED SULPHUR

In 2002 – First recorded on June 1 during the Algonquin Park East Side Butterfly Count, *Nipissing* when three were tallied (m.obs.). There were several other records from Algonquin Park throughout the season until the last on August 10 (m.obs.). Other records came from Ouimet, *Thunder Bay* on July 6 (NGE), Sandy Lake Rd., *Peterborough* on July 11 (JB), and Nellie Lake, *Cochrane* on August 3 when nine were seen (RJY). Finally, a few individuals were recorded on September 1-2 at Parry Sound, *Parry Sound* (CSAM).

Colias palaeno PALAENO SULPHUR

In 2002 – One was collected at Burntpoint Creek in northern *Kenora* on July 11 (DAS, WJC, MEO, MEP).

Pyrisitia lisa LITTLE SULPHUR

In 2002 – The only record this year was quite late– a male was found on October at the West Beach, Point Pelee N.P., *Essex* (HTO).

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Family **LYCAENIDAE**

Feniseca tarquinius THE HARVESTER

In 2002 – During the Algonquin Park East Side Butterfly Count, *Nipissing* on June 1 a single individual was seen (JJD, MB, JKl). Also recorded from Algonquin Park on June 19 at Kiosk (BDS), June 29 along the Centennial Ridges Rd. (RGT, DBa, MC), and July 5 when individuals were found at two locations during the Algonquin Park Highway 60 Butterfly Count (m.obs.). Individuals were recorded during both the Toronto T.E.A., *Metro Toronto* (July 1) and the Hog Island, *Renfrew* (July 13) butterfly counts. Other records include one at Church Line, Severn, *Simcoe* on June 7 (MH), Grandview Beach, Thunder Bay, *Thunder Bay* on July 27 (SB), Nellie Lake, *Cochrane* on August 3 (RJY), and August 4 and 6 at Tommy Thompson Park, *Metro Toronto* (CSAM, CH). Lastly, six larvae were found on alder 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* on September 26 (RAL).

Lycaena phlaeas americana AMERICAN COPPER

In 2002 – Our first record is from Ajax, *Durham* on June 9 (BH). Normally rare along the Highway 60 corridor of Algonquin Park, several were seen this year, primarily at the old airfield beside Lake of Two Rivers, *Nipissing* (m.obs.). The last record from the old airfield was on September 28 (a new late date for Algonquin) when two were found (JJD, CPR). A few days later, October 1, the last report of the year was recorded from the Carden Plain, *Victoria* (DP).

Lycaena hyllus BRONZE COPPER

In 2002 – First recorded on June 23 near Bridgenorth, *Peterborough* (JB) and at the intersection of Concession 12 and Sideroad 30, *Bruce*, where five were found (TRa, MRa, MM). Two at Mission Island, Thunder Bay, *Thunder Bay* on July 15 are noteworthy (NGE). Our last record of the year on September 1 is from Long Point P.P., *Norfolk* when 34 were counted (CSAM), indicating that the season extended beyond this date.

Lycaena epixanthe BOG COPPER

In 2002 – On July 7, nine were noted at Algonquin P.P., *Nipissing* (RJY) – our first record of the year. Another four were counted at a bog-margined pond north of Sunday Lake, Algonquin P.P. on July 10 (DCT, JKl). Several butterfly counts recorded this species (see article on page 10). One was recorded at the White Lake Fen, *Renfrew* on July 12 (RAL). Finally, many were seen on August 4 at the William Bog, Thunder Bay, *Thunder Bay* (SB).

Lycaena dorcas DORCAS COPPER

In 2002 – First noted on July 6 at Baie du Dore, *Bruce* (TRa, MRa). Recorded at several other locations in *Bruce* this year including: Dorcas Bay Fen (CDJ, DAS), MacGregor Point P.P. (TRa, MRa), Corisande Bay, Cape Hurd, Scugog Lake, Hopkins Bay and Petrel Point Nature Reserve (CDJ, DAS). Two were collected at the Mishamattawa River (in the Hudson Bay Lowlands), *Kenora* on July 9 (DAS, WJC). Many were noticed at William Bog, Thunder Bay, *Thunder Bay* on August 4 (SB). On Manitoulin Island, *Manitoulin* three were noted at Misery Bay on July 15 (MH) and another nine on the island on August 15 (RJY) represents the final record of the year.

Lycaena helloides PURPLISH COPPER

In 2002 – The only report of the year is from Manitoulin Island, *Manitoulin* on August 15 when three were noted (1 male photographed) at Barrie Island (RJY, KRY).

Purplish Copper male at Barrie Island, Manitoulin Island on 15 August 2002 (Photo: Karen Yukich).

Satyrium acadica ACADIAN HAIRSTREAK

In 2002 – First recorded on July 6 from Dartmoor Rd., *Victoria* (IM), DeLaurier Fields, Point Pelee N.P., *Essex* (AW) as well as during several butterfly counts (see article on page 10). The last record of the year is from Manitoulin Island, *Manitoulin* when one was noted on August 15 (RJY).

Satyrium titus CORAL HAIRSTREAK

In 2002 – Our first record of the year comes from the hydrocut at Hwy 73 and the 401, *Middlesex* on June 26 (AWh). Our final record of the year is from Misery Bay, Manitoulin Island, *Manitoulin* on August 15 (MH).

Satyrium edwardsii EDWARD'S HAIRSTREAK

In 2002 – Apart from those recorded during butterfly counts (see article on page 10), only two reports this year. One was recorded at Lambton Prairie, *Metro Toronto*, on July 3 (RJY). Also recorded on July 11 at Sandy Lake Rd., *Peterborough* (JB).

Satyrium calanus falcer BANDED HAIRSTREAK

In 2002 – First recorded on June 29 when one was noted during the Pinery Butterfly Count. Last noted on August 8 at Point Pelee N.P., *Essex* (HTO).

Satyrium caryaevorus HICKORY HAIRSTREAK

In 2002 – On July 3, one was recorded at Lambton Prairie, *Metro Toronto* (RJY). Recorded during three butterfly counts (see article on page 10). Our only other record is of one nectaring on Wild Bergamot *(Monarda fistulosa)* on July 30 from Rouge Park, Scarborough, *Metro Toroto* (BH).

Satyrium liparops STRIPED HAIRSTREAK

In 2002 – Our first report is not until July 11 from Sandy Lake Rd., *Peterborough* (JB). Last noted on August 2 at Blue Springs Scout Camp, *Halton* (IM).

Callophrys gryneus JUNIPER HAIRSTREAK

In 2002 – Four records this year. At the Camden East Alvar, *Lennox and Addington*, one was recorded on May 23 and a total of 15 were present on June 20 (JK). One was counted during the Pelee Island Butterfly Count, *Essex* on August 3. Finally, at Point Pelee N.P., *Essex* there were no records of the first brood, and only one of the second – a single individual was present at the Visitor Centre on August 4 (HTO).

Callophrys augustinus BROWN ELFIN

In 2002 – Our first record of the year is from the old airfield beside Lake of Two Rivers in Algonquin P.P., *Nipissing* where on May 8 a single was seen (JJD, CPR). Last noted on June 18 when a single was seen 2 km NW of Victoria Harbour, *Simcoe* (JK).

Callophrys polios HOARY ELFIN

In 2002 – As with the previous species, the first record of the year comes from the old airfield in Algonquin P.P., *Nipissing* on May 8 when a single was seen (JJD, CPR). There were several individuals at MacGregor Point P.P., *Bruce* on May 25 and 26 (TRa, MRa). Our last record of the year is from Ipperwash, *Lambton* on June 2 (RJY).

Callophrys henrici HENRY'S ELFIN

In 2002 – Singles on May 22 at Petroglyphs P.P. (DBr) and the Twin Lakes area (JB) both in *Peterborough* are the first reports of the year. Up to five individuals in the vicinity of the old airfield in Algonquin P.P., *Nipissing* from June 3-4 (WKG et al.) represents only the second record of this species from the Park.

Henry's Elfin at Lake of Two Rivers Airfield, Algonquin Park on 4 June 2002 (Photo: Jason Dombroskie)

Callophrys niphon clarki EASTERN PINE ELFIN

In 2002 – Due to unseasonably warm temperatures early in the season, a very early emergence occurred with this species first being noted on April 16 at Deer Bay, Lower Buckhorn Lake, *Peterborough* (DAS). A single was also noted on April 24 5 km SE of Fitzroy Harbour, *Ottawa-Carelton* (RAL). Then not recorded until May 15 when a single was recorded at Misery Bay, Manitoulin Island, *Manitoulin* (MH). Two records from *Halton* are noteworthy: from the Georgetown area on May 27 (BH) and the Dufferin Quarry, Milton on May 28 (IM).

Callophrys eryphon WESTERN PINE ELFIN

In 2002 – The only records this year come from Algonquin P.P.. The first was on May 5 along the old railroad bed between Source Lake and Highway 60 (JJD, AR). The last was on June 6 from the old airfield beside Lake of Two Rivers (WJG, CPR).

Strymon melinus GREY HAIRSTREAK

In 2002 – The first record of the year is presumably of an immigrant on April 30 at Point Pelee N.P., *Essex* (HTO). Individuals were seen at the Algonquin Park Visitor Centre from May 28 until June 10 by nearly all of the naturalist staff. Noted at Sandy Lake Rd., *Peterborough* on July 20 (JB, KRK, RP). Singles were seen at the Leslie St. Spit, *Metro Toronto* on August 4 (CSAM) and 6 (CSAM, CH).

On August 25, recorded at the Carden Plain, *Victoria* (DP). Finally, our last record of the year came from Point Pelee N.P., *Essex* on September 28 (AW, HTO).

Cupido comyntas EASTERN TAILED BLUE

In 2002 – Our first record is of a fresh individual on May 26 at High Park, *Metro Toronto* (RJY). Records of the first brood were, however, virtually non-existant demonstrated by the fact that this species was not reported again until June 29 when two individuals were noted during the Pinery Butterfly Count. The later broods were closer to average with reports fairly numerous through August and September. The last record is from October 12 at Point Pelee N.P., *Essex* (HTO).

Cupido amyntula albrighti WESTERN TAILED BLUE

In 2002 – Our two reports this year. Two were at Mission Island, Thunder Bay, *Thunder Bay* on June 28 (NGE). On July 7, four were present (2 collected) at the Fawn-Severn River in northern *Kenora* (DAS, WJC, MEO, MEP).

Celastrina ladon SPRING AZURE

In 2002 – Individuals were noted on April 19 on the Bruce Trail in *Halton* (WDM), Chinguacousy, *Peel* (WDM), and on Wonderland Rd., London, *Middlesex* (AWh). A total of eight individuals (all worn) tallied during the Algonquin Park Highway 60 Butterfly Count on July 5 (m.obs.) represents a new late date for the Park and our last record of the year.

Celastrina neglecta SUMMER AZURE

In 2002 – First noted on June 19 from High Park, *Metro Toronto* (RJY). A very tiny individual, less than half of normal size, was seen along the MacGregor Point P.P. Ski Trail, *Bruce* Co. on August 11 (TRa, MRa). Seven fresh individuals (probably from a third brood) were noted on September 17 at the Toronto Islands, *Metro Toronto* (RJY). Last noted on October 10 from Kiwanis Park, London, *Middlesex* (AWh).

Glaucopsyche lygdamus couperi SILVERY BLUE

In 2002 – Our first record was not until May 23 when a single was noted at the Camden East Alvar, *Lennox and Addington* (JK). On June 13, a female was observed ovipositing on developing flowerheads of Alfalfa (*Medicago sativa*) in *Metro Toronto* (JPC), where this species appears to be increasing (see note on page 16). Three records from the undersurveyed Hudson Bay Lowlands, *Kenora* are as follows: one collected on July 5, 2 km SW of the Little Shagamu River mouth (DAS) and another two there on July 7 (DAS, WJC); another was collected on July 7 at the Fawn-Severn River (DAS, WJC, MEO, MEP). On July 7 two were also tallied during the Sunderland Butterfly Count in *Durham* (m.obs.), the last date this species was recorded.

Plebejus saepiolus amica GREENISH BLUE

In 2002 – Two reports this year – two at Ouimet, *Thunder Bay* on July 6 (NGE) and a slightly worm male at Nellie Lake, *Cochrane* on August 3 (RJY).

Plebejus glandon franklinii ARCTIC BLUE

In 2002 – Three records from Polar Bear P.P., *Kenora* Seven were present (1 collected) near the mouth of the Little Shagamu River on July 7 (DAS, WJC). Another 6 were noted in the same general vicinity on July 9 (DAS, WJC, MEO, MEP). Finally, a single was present at the Sutton River, approximately 4 km from the Hudson Bay coast on July 11 (DAS, WJC).

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Family **NYMPHALIDAE**

Libytheana bachmanii AMERICAN SNOUT

In 2002 – The first migrant appeared on June 14 at Point Pelee N.P., *Essex* (HTO). A single individual observed on Sideroad 25, Nassagaweya Twp., *Halton* on July 25 (IM) was noteworty. An individual collected at Presquile P.P., *Northumberland* on July 28 (BG) is the first record for the Park (see Ontario Insects Vol. 8, No. 3, page 48). At Sandbanks P.P., *Prince Edward* two individuals recorded on August 17 (JD, AD) and another on August 24 (DBr) represent significant records. Our last record of the year is from Point Pelee N.P., *Essex*, when two were observed on October 2 (RLW, KAM).

Euptoieta claudia VARIEGATED FRITILLARY

In 2002 – Four records of this rare migratory stray. On July 19, a single was seen on Union Ave., *Metro Toronto* (DP). Three were tallied on August 3 during the Pelee Island Butterfly Count, *Essex* (m.obs.). At the Komoka Prairie, *Middlesex*, a single was observed on September 15 (IM). Finally, one was at the West Beach, Point Pelee N.P., *Essex* on October 8 (DAM, LW).

Speyeria cybele GREAT SPANGLED FRITILLARY

In 2002 – First noted on June 16 at Point Pelee N.P., *Essex* (HTO). One was visiting a hummingbird feeder at Cape Chin, *Bruce* on July 22 (CR). Last noted on September 6 at Cranberry Marsh, *Durham* (CSAM).

Speyeria aphrodite APHRODITE FRITILLARY

In 2002 – Our first report is from North Bruce, *Bruce* on July 6 when a single was noted (MRa). Last noted on September 7 when two were observed at Du Marsh Rd., W of North Bruce, *Bruce* (TRa, MRa).

Speyeria atlantis ATLANTIS FRITILLARY

In 2002 – First noted on July 4 when one was photographed at Petroglyphs P.P., *Peterborough* (DBr). An incredible 800 were counted at Nellie Lake, *Cochrane* on August 3 (RJY). Our final record is from August 25 when a single was seen at Tobermory, *Bruce* (TRa, MRa).

Boloria eunomia BOG FRITILLARY

In 2002 – Recorded on June 23 along Highway 17, 5 km W of Nipigon, *Thunder Bay* (NGE). Good numbers (10-20) were seen at the Keegos Bog, Algonquin Park, *Nipissing* June 24-25 (CDJ, DAS, WJC) and again on July 1 (WKG, CJR). There were also several records from the Hudson Bay Lowlands, *Kenora* as follows: four (1 collected) on July 9 at the Mishamattawa River (DAS, WJC); three at two locations along Burntpoint Creek on July 11 (DAS, WJC, MEO, MEP) and; three (1 collected) at the Sutton River (DAS, WJC).

Boloria selene atrocostalis SILVER-BORDERED FRITILLARY

In 2002 – The first record of the year is of six at the Larose Forest, *Prescott and Russell* on June 9 (TH). Last reported on August 20 along the Martin Lake logging road, Algonquin Park, *Haliburton* when they were noted as being common (JJD, BDS) suggesting that the season extended beyond this date.

Boloria bellona MEADOW FRITILLARY

In 2002 – Our first individuals (three) were noted on May 25 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL). Last recorded on August 27 when a single was at Rouge Valley Park, *Metro Toronto* (CSAM).

Boloria frigga FRIGGA FRITILLARY

In 2002 – Only one record this year. Three were collected on July 6, 1 km N of Peawanuk in northern *Kenora* (DAS, WJC, MEP).

Boloria freija FREIJA FRITILLARY

In 2002 – A single record – two (one collected) were present at the Shagamu River, approximately 30 km S of Hudson Bay in northern *Kenora* on July 5 (DAS).

Boloria chariclea ARCTIC FRITILLARY

In 2002 – Two records this year – Ten at Nellie Lake, *Cochrane*, on August 3 (RJY) and a record from William Bog, Thunder Bay, *Thunder Bay* on August 4 (SB).

Chlosyne nycteis SILVERY CHECKERSPOT

In 2002 – Our first was not reported until June 18 when two were present at the Algonquin Visitor Centre, Algonquin Park, *Nipissing* (JJD, JKl). Last noted on July 13 at Elginton Flats, *Metro Toronto* where two were present (RJY).

Charidryas harrisii HARRIS CHECKERSPOT

In 2002 – On June 20 one was present at Millbridge, *Hastings* (DAS, CDJ, KEB, IMc, JCh) marking the first record of the year. Our last report of the season is from July 5 when during the Algonquin Highway 60 Butterfly Count 45 were tallied (m.obs.) strongly suggesting that the actual flight date extended well beyond this date.

Phyciodes tharos PEARL CRESCENT

In 2002 – First recorded on May 25 when six were caught 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL). Several reports from the northern portions of their apparent range include quite a few records from *Bruce* between July 1 and September 9 (TRa, MRa) as well as numbers tallied on the Haliburton, Orillia and Petroglyhps Butterfly Counts (m.obs.). From October 1-8, there were several records from the Leslie St. Spit, *Metro Toronto* (CSAM). An incredibly late individual was reported from Cranberry Marsh, *Durham* on November 9 (RP).

Phyciodes cocyta NORTHERN CRESCENT

In 2002 – On May 15, a worn individual was found at Point Pelee N.P., *Essex* (HTO). This was undoubtedly an immigrant from the south, as the first resident generation at Pelee does not usually emerge until later in May (PPNHN). Our next record comes from the same date and location as the first Pearl Crescent record – one was caught 5 km SE of Fitzroy Harbour, *Ottawa-Carelton* on May 25 (RAL). Individuals collected from Peawanuk in northern *Kenora* on July 6, 8 and 10 (DAS, WJC, MEP) represent a seldom collected area. The last record of the year is from 5km SE of Fitzoy Harbour, when on September 26 four were seen (RAL).

Phyciodes batesii TAWNY CRESCENT

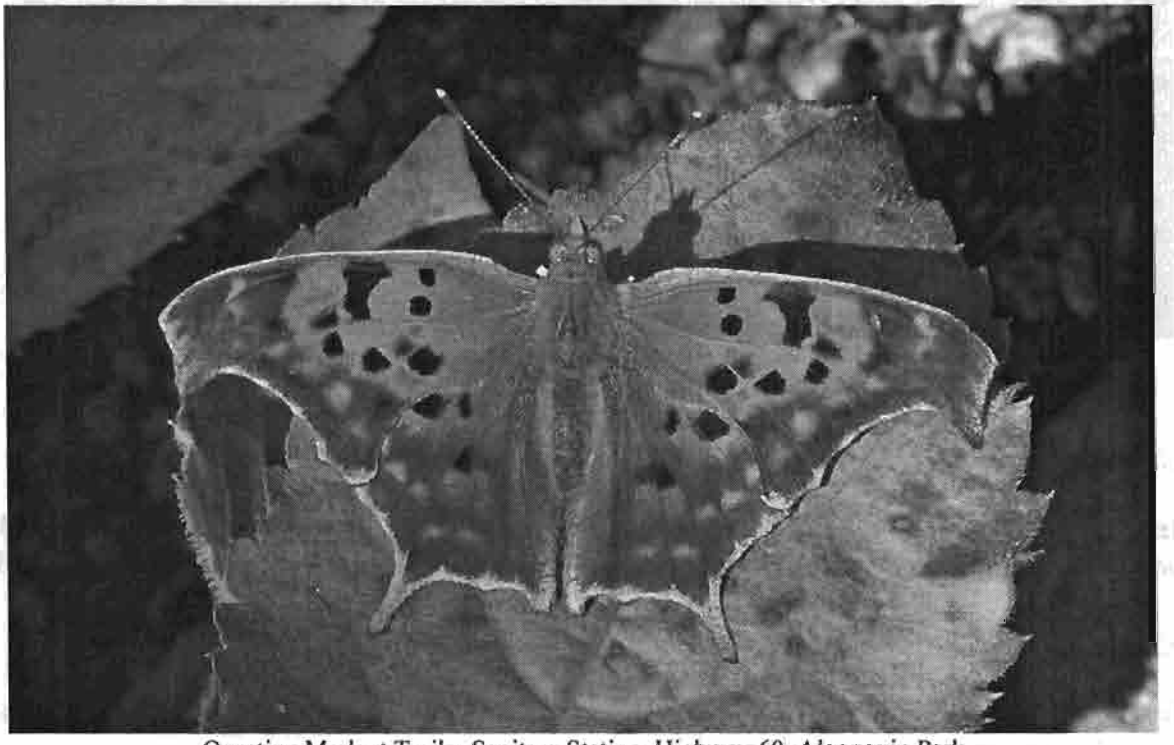
In 2002 – As usual, very few records of this rather local species. Our first was on June 2 when one was caught 5 km NW of Carp, *Ottawa-Carelton* (RAL). Two were noted on June 19 at Hwy 46 near Sandy Lake Rd., *Peterborough* (JB). Singles were seen at Swift Rapids Rd., Severn, *Simcoe* on June 28 and in Carden Twp, *Victoria* on June 29 (MH). A total of three were counted during the Pinery Butterfly Count on June 29 (m.obs.). Lastly, two were reported 2 km NE of Hardwood Plains, *Ottawa-Carleton* on July 1 (TH).

Euphydryas phaeton BALTIMORE CHECKERSPOT

In 2002 – Several colonies reported this year. A colony on Concession 12 at Sideroad 30, *Bruce* had the following records: June 23 – one adult (TRa, MRa, MM); July 1 – 40 adults including some mating (TRa, MRa); July 21 – one adult but lots of eggs noted (TRa, GR). Another colony in *Bruce* at Tie Road, near the Bruce Nuclear Plant had a cluster of eggs that had hatched to first instar larvae on July 21 (TRa, MRa, GR). Fifty adults and five larvae were present on June 30 at Ojibway Prairie, Windsor, *Essex* (RJY). A total of 21 were counted at Blackwater, *Durham* on July 20 (CSAM). A colony at Wilson Creek Road, Rainy River, *Rainy River* on August 11 was noteworthy (DHE). Also reported from numerous butterfly counts this year (see article on page 10).

Polygonia interrogationis QUESTION MARK

In 2002 – First noted on May 31 when a single was found at Crediton Parkway, *Peel* (CR). Three were seen at Dorchester Mill Pond, *Middlesex* on October 8 (AWh) a rather late date. The last record, however, was a late individual at Point Pelee N.P., *Essex* on November 11 (AW).



Question Mark at Trailer Sanitary Station, Highway 60, Algonquin Park
on 25 August 4 2002 (Photo: Jason Dombroskie)

Polygonia comma EASTERN COMMA

In 2002 – Early season records included March 12 at Point Pelee N.P., *Essex* (SER) and March 30 at Meadowlily, London, *Middlesex* (AWh). There were three records in November – Point Pelee N.P. (RLW, KAM, AW) and Humber Bay Park, *Metro Toronto* (CSAM) on the 8th, and the Leslie St. Spit, *Metro Toronto* on the 9th (CSAM).

Polygonia satyrus SATYR COMMA

In 2002 – Three records this year to include: one on June 12 at S. Hill St., Thunder Bay, *Thunder Bay* (NGE); one on June 13 at Burbot Lake, Hwy 630, *Nipissing* (CDJ, DAS); and two at Nellie Lake, *Cochrane* on August 3 (RJY).

Satyr Comma at Nellie Lake, Cochrane District on 3 August 2002 (Photo: Karen Yukich)

Polygonia faunus GREEN COMMA

In 2002 – First noted on April 17 when two were noted along Hwy 507, *Peterborough* (JB). Our last record is of a single caught and released at Petroglyphs P.P., *Peterborough* on September 7 (DBr).

Polygonia gracilis HOARY COMMA

In 2002 – Two at Nellie Lake, *Cochrane* on August 3 (RJY) and one at Chapleau, *Sudbury* on August 7 (RJY) are our only records this year.

Polygonia progne GREY COMMA

In 2002 – First noted on April 18 at Devil's 4-mile Rd., near Twin Lakes, *Peterborough* (JB). An extremely late individual was noted at Point Pelee N.P., *Essex* on November 8 (RLW, AW, KAM).

Nymphalis vaualbum j-album COMPTON TORTOISESHELL

In 2002 – The first overwintering individual was noted on March 30 when a single was seen at South Humber Park, *Metro Toronto* (RJY). The last of the overwintering generation was recorded on May 8 when a single worn individual was noted at the old airfield near Lake of Two Rivers, Algonquin Park, *Nipissing* (JJD, CPR). The first report of the new generation came on July 9 with a single fresh individual caught in a spider web was noted at Petroglyphs P.P., *Peterborough* (DBr). Several mid-October records including: a single on the 10th in Algonquin Park (BDS) representing a new park-late date; two at Petroglyphs P.P. on the 15th (DBr); and one in a stairwell of the Bruce Nuclear Plant, *Bruce* on the 16th (TRa).

Nymphalis antiopa MOURNING CLOAK

In 2002 – Two "winter" records, both from Point Pelee N.P., *Essex*: on January 14, one was flying at Sanctuary Pond (RB) and another was noted on February 25 at DeLaurier Fields (FJU). Our next earliest records are from March 30 in *Metro Toronto* when one was noted at the Humber Marshes (RJY) and two were seen on Quebec Ave. (CSAM, BM). On June 1, two were noted nectaring on Choke Cherry (*Prunus virginiana*) at Petroglyphs P.P., *Peterborough* (DBr). An extremely late individual was noted on November 20 in the Toronto area (LS) a new late date for the Toronto area according to Barry Harrison.

Aglais milberti MILBERT'S TORTOISESHELL

In 2002 – The earliest and latest report of the year come from the London area, *Middlesex*: March 30 at Meadowlily, London (AWh) and September 5 at Hwy 73 and Hwy 401, east of London (AWh).

Vanessa virginiensis AMERICAN LADY

In 2002 – The first migrants were noted in mid-April and included one at Point Pelee N.P., *Essex* on the 16th (AW), and individuals in the Toronto area on the 17th (BH) and 18th (RJY). Overall, this species was not very common this year. The last report is of a single on October 15 at High Park, *Metro Toronto* (RJY).

Vanessa cardui PAINTED LADY

In 2002 – Very few records this year. First noted on May 2 at the Toronto Islands, *Metro Toronto* (LS) and recorded last when a fresh individual was noted at the Leslie St. Spit, *Metro Toronto* (RJY).

Vanessa atalanta RED ADMIRAL

In 2002 – As was the case with American Lady, this migratory species was not overly common this year. Our first migrant was noted on April 15 at Point Pelee N.P., *Essex* (HTO). Close behind were individuals on April 18 reported from 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL) and Port Hope, *Northumberland* (EK). Late records include singles on October 6 at High Park (CSAM) and the Leslie St. Spit (RJY) both in *Metro Toronto*. An exceptionally late individual was found at Hungry Hollow, *Middlesex* on November 8 (PCh).

Junonia coenia COMMON BUCKEYE

In 2002 – Our first immigrant occurred on June 29 when a worn individual was noted at the Carden Plain, *Victoria* (MH). Our next report did not occur until July 22 from Point Pelee N.P., *Essex* (HTO). By August, this species had become relatively common in southwestern Ontario with records as far north as Dorcas Bay, *Bruce* on August 2 (TRa, MRa), Grandview Beach, Thunder Bay, *Thunder Bay* on September 8 (SB), and Moodie Drive, *Ottawa-Carleton* on September 22 (TH). A record high count of 118 for Point Pelee N.P. on August 18 is noteworthy (CSAM, BR). A total of 49, including a female ovipositing on gerardia (*Agalinis* sp.), were noted on the Toronto Islands, *Metro Toronto* on September 6 (RJY). Late records include one at the Bruce B Nuclear Station, *Bruce* on October 10 (TRa, MRa) and another on the same date at Oro-Medonte Line 13, *Simcoe* (MH). The latest record is from Point Pelee N.P. on November 8 (RLW, KAM).

Limenitis arthemis arthemis WHITE ADMIRAL

In 2002 – First noted on June 16 from the Halton Regional Forest, *Halton* (RJY). An individual was taking sap from a Pussy Willow (*Salix discolor*) on July 4 in Nassagaweya Twp, *Halton* (IM). Two fresh individuals recorded at Peawanuk, in northern *Kenora* on July 10 (DAS) are noteworthy in that they come from a highly undersurveyed part of the province. An individual on September 14 from Radiant Lake, Algonquin Park, *Nipissing* (CB) represents a new late date for Algonquin. Other late records include singles at MacGregor Point P.P., *Bruce* (TRa), and the Leslie St. Spit, *Metro Toronto* (CSAM) on September 14, Cape Chin, *Bruce* on September 15 (CR), and High Park, *Metro Toronto* on September 16 (CSAM).

Limenitis arthemis astyanax RED SPOTTED PURPLE

In 2002 – First noted on June 22 at Blindline, Saugeen Twp., *Bruce* (MRa) _ towards the northern edge of the range of this subspecies. Other noteworthy records include singles at the Carden Plain, *Victoria* on June 25 (MH), Swift Rapids Rd., Severn, *Simcoe* on June 28 (MH), and Presquile P.P., *Northumberland* on July 2 (BG, MG). Late records, both from *Essex*, involve two individuals at the West Dock, Pelee Island on September 21 (JK) and one on September 28 at the West Beach, Point Pelee N.P. (AW, HTO) representing a new late date for Pelee.

Limenitis archippus VICEROY

In 2002 – First recorded on June 9 when a single was seen at the MacGregor Point P.P. picnic area, *Bruce* (TRa, MRa). There were two flying late in the evening on June 29 at Savanne River, *Thunder Bay* (NGE). Late records included one at Sandbanks P.P., *Prince Edward* on September 30 (DBr), seven at the Leslie St. Spit, *Metro Toronto* on October 1 (CSAM) and one on October 12 at Point Pelee N.P., *Essex* (HTO).

Asterocampa celtis HACKBERRY EMPEROR

In 2002 – Five fresh individuals were noted on June 29 at Point Pelee N.P., *Essex* (RJY). The only other locations with reports this year were Pelee Island, *Essex* when six were counted during the butterfly count there on August 10 (m.obs.) and Komoka P.P., *Middlesex* on August 26 (DAM). Our last report is from Point Pelee on August 31 when this species was all over the road and landing on the observer's arms (TH) suggesting that flight extended well beyond this date.

Asterocampa clyton TAWNY EMPEROR

In 2002 – Our first record this year is from the North Thames Valley, London, *Middlesex* on June 22 (GP). One was recorded at Skunk's Misery, *Middlesex* on July 7 during the butterfly count (m.obs.). Recorded at Point Pelee N.P., *Essex* from July 23 (AW) to August 10 (m.obs.). Our final record is from Komoka P.P., *Middlesex* on August 26 (AWh).

Enodia anthedon NORTHERN PEARLY-EYE

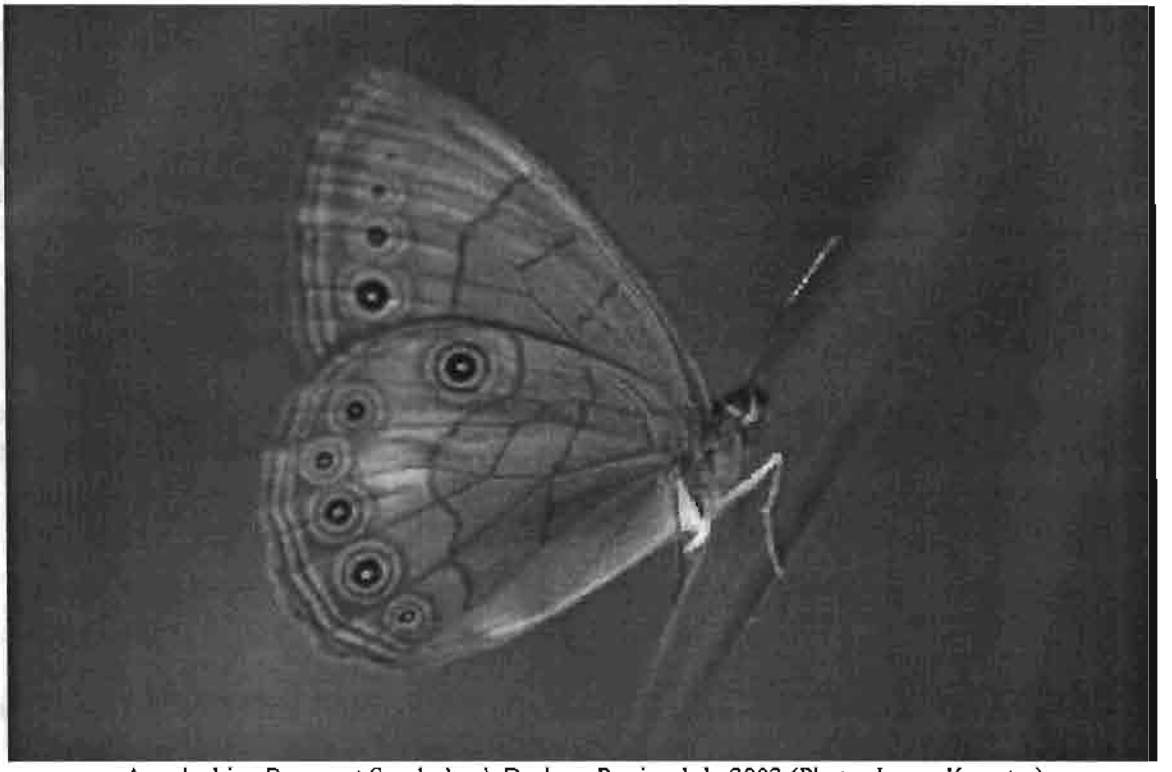
In 2002 – Not recorded until June 29 when a single was found during the Carden Butterfly Count, *Victoria* (m.obs.). Last noted on August 31 when one was present 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL).

Satyrodes eurydice EYED BROWN

In 2002 – First recorded on June 10 when a single was at Sandbanks P.P., *Prince Edward* (JD). A total of 459 and 483 were recorded during the Sunderland (*Durham)* and Haliburton (*Haliburton*) butterfly counts, respectively (m.obs.). Our last was reported on August 5 when two were at MacGregor Point P.P., *Bruce* (TRa, MRa).

Satyrodes appalachia leewi APPALACHIAN BROWN

In 2002 – Our first record is of two during the Oshawa Butterfly Count, *Durham* on June 29 (m.obs.). Other noteworthy records include: one at Matchedash Bay, *Simcoe* on July 1 (MH); one collected on July 11 4.5 km ESE of Delta, *Leeds and Grenville* (JPC); several at the White Lake Fen, *Renfrew* on July 12 (RAL); and records from several locations in *Bruce* from July 6 to August 5 (TRa, MRa).



Appalachian Brown at Sunderland, Durham Region July 2002 (Photo: James Kamstra)

Megisto cymela LITTLE WOOD-SATYR

In 2002 – Interestingly, on June 10 (our earliest date this year) there were records from several locations including Milton, *Halton* (IM), Rosemount Rd., Tay Twp, *Simcoe* (MH), in *Prince Edward* from McCauley Mountain C.A. (DBr) and Sandbanks P.P. (JD), and lastly from 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL). Last recorded on August 1 when two were noted at High Park, *Metro Toronto* (RJY). Normally only single brooded in Ontario, a fresh individual at Tilden's Woods, Point Pelee N.P., *Essex* on October 12 was almost certainly from a second brood (see *Point Pelee Natural History News* 2: 50).

Coenonympha tullia inornata COMMON RINGLET

In 2002 – Not recorded until June 7 when reported from two locations in *Bruce* (TRA, MRA), Rail Trail W of Atkinson's Rd. (8), Galway-Cavendish Forest Access Rd. (1), *Peterborough* (JB), and 5 km SE of Fitzroy Harbour, *Ottawa-Carleton* (RAL). Recorded at Peawanuk in northern *Kenora* on July 10 (DAS) representing one of only a handful of records from the Hudson Bay area of Ontario. Quite a few records from August and September, representing the partial second brood culminating with a September 14 record from the MacGregor Point P.P. Ski Trail, *Bruce* (TRa).

Cercyonis pegala nephele COMMON WOOD-NYMPH

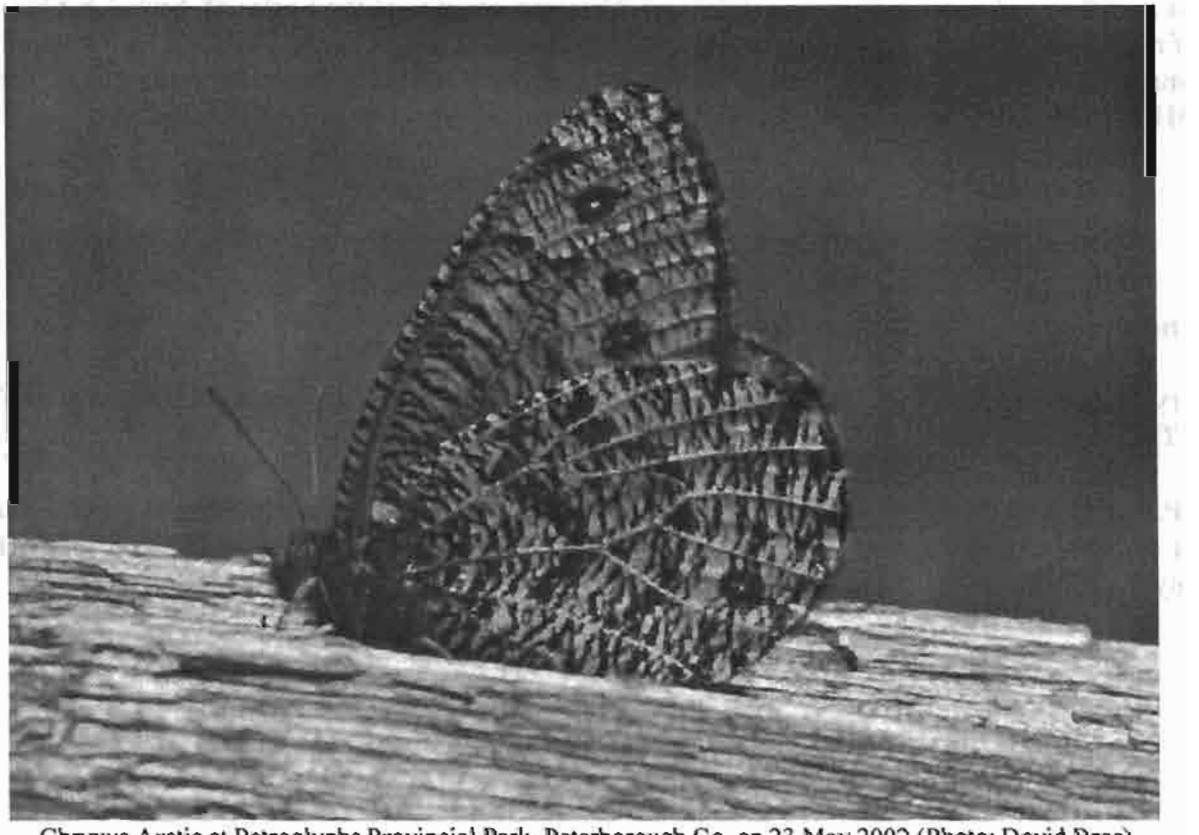
In 2002 – First noted on June 29 when a single was seen during the Carden Butterfly Count, *Victoria* (m.obs.), followed by a report from Point Pelee N.P., *Essex* on July 1 (PPNHN). Not reported again until July 6 when three were tallied during the Long Point Butterfly Count, *Norfolk* (m.obs.). Reported nearly daily from mid-July to mid-August. The last individuals were seen on September 1 at Skunk's Misery, *Middlesex* (AWh, SP) and at Parry Sound, *Parry Sound* on September 1-2 (CSAM).

Oeneis macounii MACOUN'S ARCTIC

In 2002 – Only reported this year from the Lake Travers area of Algonquin Park, *Nipissing*. The first individuals (11 in total) were seen on June 18 at the old millsite beside Lake Travers (MWPR) where they were also present on June 22 (APP) and June 25 (CDJ, DAS, WJC). Three were noted at Travers Creek on June 22 (APP). Individuals were also seen on June 24 along the Lake Travers Road at km 66.5 and km 70.5 (RGT).

Oeneis chryxus CHRYXUS ARCTIC

In 2002 – Our first record of the year is of one at the old airfield beside Lake of Two Rivers, Algonquin Park, *Nipissing* on May 22 (JJD) as well as a total of 15 in the Twin Lakes area, *Peterborough* on the same date (JB). The last report received is of three at the old airfield in Algonquin on June 13 (WKG, JKl, BC, DBir).



Chryxus Arctic at Petroglyphs Provincial Park, Peterborough Co. on 23 May 2002 (Photo: David Bree)

Oeneis jutta ascerta JUTTA ARCTIC

In 2002 – Only two reports this year. One was seen at Alfred Bog, *Ottawa-Carleton* on June 1 (TH). Another single was seen flying along the Opeongo Road in Algonquin Park, *Nipissing* on June 18 (APP).

Danaus plexippus MONARCH

In 2002 – The first migrant arrived at Point Pelee N.P., *Essex* on May 3 (PAR). A single on May 26 at the old airfield beside Lake of Two Rivers, Algonquin Park, *Nipissing* (JJD) was a new early date for the Park. Reported on nearly a daily basis from mid-June until the first week of October from as far north as Manitoulin Island, *Manitoulin* (CDJ, MH). With not many other flowers out, one on June 21 was nectaring on Blue Flag (*Iris versicolor*) at Du Marsh Rd., W of North Bruce, *Bruce* (TRa, MRa). On July 12 a pair was seen *in copula*, as well as several large larvae on Common Milkweed (*Asclepias syriaca*) at Petroglyphs P.P., *Peterborough* (CDJ, KEB, IMc, RR). The fall migration was first noticed durng the last few days of July in the Toronto area (BH). Five larvae on one Common Milkweed plant were noted on August 10 at Cape Chin, *Bruce* (CR). By August 25, numbers were starting to build in the *Metro Toronto* area with five individuals at once on a *Buddleia* plant (CR) and a total of 353 counted at the Leslie St. Spit (RJY). On September 18 one was seen gliding West, 10-15 stories high in downtown Toronto (JPC). Hundreds were seen leaving the tip of Point Pelee N.P., *Essex* on September 29 (AW) with 190 counted on the same day at East Point Park, Scarborough, *Metro Toronto* (DD). One on October 1 at Km 19 of Hwy 60, Algonquin Park, *Nipissing* (APP) was a new late date for the Park. On this same date, peak numbers were noted in *Metro Toronto* – for example, a total of 28 were noticed at once on *Buddleia* at Crediton Parkway (CR) and 220 were counted at the Leslie St. Spit (CSAM). The peak of migration at Point Pelee occurred during the first week of October (PPNHN). On October 7-8, an estimated 5000 were present at Pelee (SRu). Late records include November 8 in the *Metro Toronto* area (BH), November 9 at the Leslie St. Spit (DP) and November 11 at Point Pelee (AW).

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References

Layberry, R.A, P.W. Hall and J.D. Lafontaine. 1998. The Butterflies of Canada. University of Toronto Press. Toronto.

Opler, P.A. and A.D. Warren. 2003. Butterflies of North America 2. Scientific Names List for Butterfly Species of North America, north of Mexico. Contributions of the C.P. Gillette Museum of Arthropod Diversity, Colorado State University.

CHECKLIST OF ONTARIO BUTTERFLIES AND SKIPPERS

by Colin D. Jones

Superfamily: **HESPERIOIDEA** Latreille	
Family: **HESPERIIDAE** Latreille	**SKIPPERS**
Subfamily: **Pyrginae** Burmeister	**PYRGINE SKIPPERS**
___ *Epargyreus clarus* (Cramer)	SILVER-SPOTTED SKIPPER
a) *clarus*	
___ *Urbanus proteus* (Linnaeus)	LONG-TAILED SKIPPER
___ *Achalarus lyciades* (Geyer)	HOARY EDGE
___ *Thorybes pylades* (Scudder)	NORTHERN CLOUDYWING
a) *pylades*	
___ *Staphylus hayhurstii* (W.H. Edwards)	HAYHURST'S SCALLOPWING
___ *Erynnis icelus* (Scudder & Burgess)	DREAMY DUSKYWING
___ *Erynnis brizo* (Boisduval & Leconte)	SLEEPY DUSKYWING
a) *brizo*	
___ *Erynnis juvenalis* (Fabricius)	JUVENAL'S DUSKYWING
a) *juvenalis*	
___ *Erynnis horatius* (Scudder & Burgess)	HORACE'S DUSKYWING
___ *Erynnis martialis* (Scudder)	MOTTLED DUSKYWING
___ *Erynnis zarucco* (Lucas)	ZARUCCO DUSKYWING
___ *Erynnis funeralis* (Scudder & Burgess)	FUNEREAL DUSKYWING
___ *Erynnis lucilius* (Scudder & Burgess)	COLUMBINE DUSKYWING
___ *Erynnis baptisiae* (Forbes)	WILD INDIGO DUSKYWING
___ *Erynnis persius* (Scudder)	PERSIUS DUSKYWING
a) persius	
b) borealis (Cary)	
___ *Pyrgus centaureae* (Rambur)	GRIZZLED SKIPPER
a) *freija* (Warren)	
___ *Pyrgus communis* (Grote)	COMMON CHECKERED SKIPPER
___ *Pholisora catullus* (Fabricius)	COMMON SOOTYWING
Subfamily **Heteropterinae** Aurivillius	**INTERMEDIATE SKIPPERS**
___ *Carterocephalus palaemon* (Pallas)	ARCTIC SKIPPER
a) *mandan* (W.H. Edwards)	
Subfamily **Hesperiinae** Latreille	**BRANDED SKIPPERS**
___ *Lerema accius* (J.E. Smith)	CLOUDED SKIPPER
___ *Ancyloxypha numitor* (Fabricius)	LEAST SKIPPER
___ *Oarisma garita* (Reakirt)	GARITA SKIPPERLING
___ *Thymelicus lineola* (Ochsenheimer)	EUROPEAN SKIPPER
___ *Hylephila phyleus* (Drury)	FIERY SKIPPER
a) *phyleus*	
___ *Hesperia comma* (Linnaeus)	COMMON BRANDED SKIPPER
a) *manitoba* (Scudder)	
b) *borealis* Lindsey	
c) *laurentina* (Lyman)	
___ *Hesperia leonardus* Harris	LEONARD'S SKIPPER
a) *leonardus*	
___ *Hesperia sassacus* Harris	INDIAN SKIPPER
___ *Polites peckius* (W. Kirby)	PECK'S SKIPPER
___ *Polites themistocles* (Latreille)	TAWNY-EDGED SKIPPER
___ *Polites origenes* (Fabricius)	CROSSLINE SKIPPER
a) *origenes*	

___ *Polites mystic* (W.H. Edwards)	LONG DASH SKIPPER
___ *Polites vibex* (Geyer)	WHIRLABOUT
a) *vibex*	
___ *Wallengrenia egeremet* (Scudder)	NORTHERN BROKEN-DASH
___ *Pompeius verna* (W.H. Edwards)	LITTLE GLASSYWING
___ *Atalopedes campestris* (Boisduval)	SACHEM
___ *Anatrytone logan* (W.H. Edwards)	DELAWARE SKIPPER
a) *logan*	
___ *Poanes massasoit* (Scudder)	MULBERRY WING
a) *massasoit*	
___ *Poanes hobomok* (Harris)	HOBOMOK SKIPPER
= form "pocahontas" (Scudder)	
___ *Poanes zabulon* (Boisduval and Leconte)	ZABULON SKIPPER
___ *Poanes viator* (W.H. Edwards)	BROAD-WINGED SKIPPER
a) *viator*	
___ *Euphyes dion* (W.H. Edwards)	DION SKIPPER
a) *dion*	
___ *Euphyes dukesi* (Lindsey)	DUKES' SKIPPER
___ *Euphyes conspicua* (W.H. Edwards)	BLACK DASH
a) *conspicua*	
___ *Euphyes bimacula* (Grote & Robinson)	TWO-SPOTTED SKIPPER
a) *bimacula*	
___ *Euphyes vestris* (Boisduval)	DUN SKIPPER
a) *metacomet* (Harris)	
___ *Atrytonopsis hianna* (Scudder)	DUSTED SKIPPER
a) *hianna*	
___ *Amblyscirtes hegon* (Scudder)	PEPPER AND SALT SKIPPER
___ *Amblyscirtes vialis* (W.H. Edwards)	COMMON ROADSIDE SKIPPER
___ *Calpodes ethlius* (Stoll)	BRAZILIAN SKIPPER
___ *Panoquina ocola* (W.H. Edwards)	OCOLA SKIPPER

Superfamily **PAPILIONOIDEA** Latreille
Family **PAPILIONIDAE** Latreille

Subfamily **Papilioninae** Latreille	**SWALLOWTAILS**
___ *Battus philenor* (Linnaeus)	PIPEVINE SWALLOWTAIL
a) *philenor*	
___ *Eurytides marcellus* (Cramer)	ZEBRA SWALLOWTAIL
___ *Papilio polyxenes* Fabricius	BLACK SWALLOWTAIL
a) *asterias* Stoll	
___ *Papilio machaon* Linnaeus	OLD WORLD SWALLOWTAIL
a) *hudsonianus* A.H. Clark	
___ *Papilio cresphontes* Cramer	GIANT SWALLOWTAIL
___ *Papilio glaucus* Linnaeus	EASTERN TIGER SWALLOWTAIL
a) *glaucus*	
___ *Papilio canadensis* Rothschild & Jordan	CANADIAN TIGER SWALLOWTAIL
___ *Papilio troilus* Linnaeus	SPICEBUSH SWALLOWTAIL
a) *troilus*	

Family **PIERIDAE** Duponchel

Subfamily **Pierinae** Duponchel	**WHITES AND MARBLES**
___ *Pontia protodice* (Boisduval & Leconte)	CHECKERED WHITE
___ *Pontia occidentalis* (Reakirt)	WESTERN WHITE
a) *occidentalis*	
___ *Pieris oleracea* Harris	MUSTARD WHITE
a) *oleracea*	
___ *Pieris virginiensis* W.H. Edwards	WEST VIRGINIA WHITE
___ *Pieris rapae* (Linnaeus)	CABBAGE WHITE
___ *Ascia monuste* (Linnaeus)	GREAT SOUTHERN WHITE
___ *Euchloe ausonides* Lucas	LARGE MARBLE
a) *ausonides*	
___ *Euchloe olympia* (W.H. Edwards)	OLYMPIA MARBLE

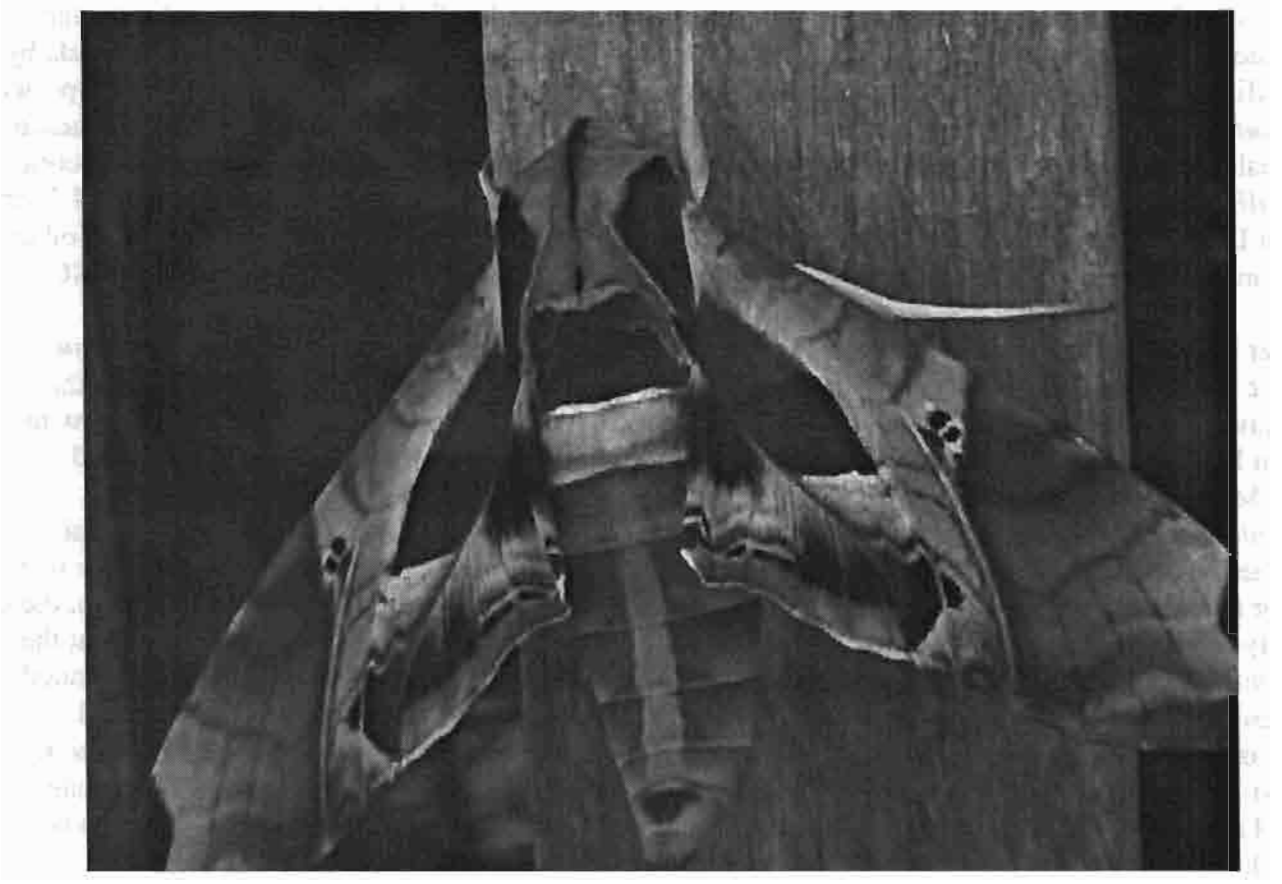
Subfamily **Coliadinae** Swainson	**SULPHURS**
___ *Colias philodice* Godart	CLOUDED SULPHUR
a) *philodice*	
___ *Colias eurytheme* Boisduval	ORANGE SULPHUR
___ *Colias gigantea* Strecker	GIANT SULPHUR
a) *gigantea*	
__ *Colias pelidne* Boisduval & Leconte	PELIDNE SULPHUR
a) *pelidne*	
___ *Colias interior* Scudder	PINK-EDGED SULPHUR
___ *Colias palaeno* (Linnaeus)	PALAENO SULPHUR
a) *chippewa* (W.H. Edwards)	
___ *Zerene cesonia* (Stoll)	SOUTHERN DOGFACE
___ *Phoebis sennae* (Linnaeus)	CLOUDLESS SULPHUR
a) *eubule* (Linnaeus)	
___ *Phoebis philea* (Linnaeus)	ORANGE-BARRED SULPHUR
___ *Pyrisitia lisa* (Boisduval & Leconte)	LITTLE YELLOW
___ *Abaeis nicippe* (Cramer)	SLEEPY ORANGE
___ *Nathalis iole* (Boisduval)	DAINTY SULPHUR
Family **LYCAENIDAE** Leach	
Subfamily **Miletinae** Corbet	**HARVESTERS**
___ *Feniseca tarquinius* (Fabricius)	THE HARVESTER
Subfamily **Lycaeninae** Leach	**COPPERS**
___ *Lycaena phlaeas* (Linnaeus)	AMERICAN COPPER
a) *americana* Harris	
___ *Lycaena dione* (Scudder)	GREY COPPER
___ *Lycaena hyllus* (Cramer)	BRONZE COPPER
___ *Lycaena epixanthe* (Boisduval & Leconte)	BOG COPPER
a) *michiganensis* Rawson	
___ *Lycaena dorcas* W. Kirby	DORCAS COPPER
a) *dorcas*	
___ *Lycaena helloides* (Boisduval)	PURPLISH COPPER
Subfamily **Theclinae** Swainson	**HAIRSTREAKS**
___ *Satyrium acadica* (W.H. Edwards)	ACADIAN HAIRSTREAK
a) *acadica*	
___ *Satyrium titus* (Fabricius)	CORAL HAIRSTREAK
a) *titus*	
___ *Satyrium edwardsii* (Grote & Robinson)	EDWARDS' HAIRSTREAK
___ *Satyrium calanus* (Hübner)	BANDED HAIRSTREAK
a) *falacer* (Godart)	
___ *Satyrium caryaevorus* (McDunnough)	HICKORY HAIRSTREAK
___ *Satyrium liparops* (Leconte)	STRIPED HAIRSTREAK
a) *strigosum* (Harris)	
b) *fletcheri* (Michener & dos Passos)	
___ *Satyrium favonius* (J.E. Smith)	SOUTHERN HAIRSTREAK
a) *ontario* (W.H. Edwards)	
___ *Callophrys gryneus* (Hübner)	JUNIPER HAIRSTREAK
a) *gryneus*	
___ *Callophrys augustinus* (Westwood)	BROWN ELFIN
a) *augustinus*	
___ *Callophrys polios* (Cook & Watson)	HOARY ELFIN
a) *polios*	
___ *Callophrys irus* (Godart)	FROSTED ELFIN
a) *irus*	
___ *Callophrys henrici* (Grote & Robinson)	HENRY'S ELFIN
a) *henrici*	

___ *Callophrys lanoraieensis* (Sheppard)	BOG ELFIN
___ *Callophrys niphon* (Hübner)	EASTERN PINE ELFIN
a) *clarki* (T.N. Freeman)	
___ *Callophrys eryphon* (Boisduval)	WESTERN PINE ELFIN
b) *eryphon*	
___ *Parrhasius m-album* (Boisduval & Leconte)	WHITE-M HAIRSTREAK
___ *Strymon melinus* Hübner	GREY HAIRSTREAK
a) *melinus*	
b) *franki* Field	
___ *Erora laeta* (W.H. Edwards)	EARLY HAIRSTREAK
Subfamily **Polyommatinae** Swainson	**BLUES**
___ *Leptotes marina* (Reakirt)	MARINE BLUE
___ *Cupido comyntas* (Godart)	EASTERN TAILED BLUE
a) *comyntas*	
___ *Cupido amyntula* (Boisduval)	WESTERN TAILED BLUE
a) *albrighti* Clench	
___ *Celastrina ladon* (Cramer)	SPRING AZURE
a) *lucia* (W. Kirby)	
___ *Celastrina neglecta* (W.H. Edwards)	SUMMER AZURE
a) *neglecta*	
___ *Celastrina* sp. (undescribed species)	CHERRY GALL AZURE
___ *Glaucopsyche lygdamus* (Doubleday)	SILVERY BLUE
a) *couperi* Grote	
___ *Plebejus idas* (Linnaeus)	NORTHERN BLUE
a) *scudderi* (W.H. Edwards)	
___ *Plebejus melissa* (W.H. Edwards)	MELISSA (KARNER) BLUE
a) *samuelis* Nabokov	
___ *Plebejus saepiolus* (Boisduval)	GREENISH BLUE
a) *amica* (W.H. Edwards)	
___ *Plebejus optilete* (Knoch)	CRANBERRY BLUE
a) *yukona* (Holland)	
___ *Plebejus glandon* (de Prunner)	ARCTIC BLUE
d) *franklinii* (Curtis)	
Family **NYMPHALIDAE** Swainson	
Subfamily **Libytеinae** Boisduval	**SNOUTS**
___ *Libytheana carienta* (Cramer)	AMERICAN SNOUT
a) *bachmanii* (Kirtland)	
Subfamily **Argynninae** Blanchard	**FRITILLARIES**
___ *Euptoieta claudia* (Cramer)	VARIEGATED FRITILLARY
___ *Speyeria cybele* (Fabricius)	GREAT SPANGLED FRITILLARY
a) cybele	
b) krautwurmi (Holland)	
___ *Speyeria aphrodite* (Fabricius)	APHRODITE FRITILLARY
a) *aphrodite*	
b) *alcestis* (W.H. Edwards)	
___ *Speyeria idalia* (Drury)	REGAL FRITILLARY
___ *Speyeria atlantis* (W.H. Edwards)	ATLANTIS FRITILLARY
a) *atlantis* (W.H. Edwards)	
b) *canadensis* (dos Passos)	
___ *Boloria eunomia* (Esper)	BOG FRITILLARY
a) *triclaris* (Hübner)	
b) *dawsoni* (Barnes & McDunnough)	
___ *Boloria selene* [Denis & Schiffermuller]	SILVER-BORDERED FRITILLARY
a) *atrocostalis* (Huard)	

___ *Boloria bellona* (Fabricius)	MEADOW FRITILLARY
a) *bellona*	
b) *toddi* (Holland)	
___ *Boloria frigga* (Thunberg)	SAGA FRITILLARY
a) *saga* (Staudinger)	
___ *Boloria freija* (Thunberg)	FREIJA FRITILLARY
a) *freija*	
___ *Boloria chariclea* (Schneider)	ARCTIC FRITILLARY
a) *arctica* (Zetterstedt)	
b) *grandis* (Barnes & McDunnough)	
Subfamily Melitaeinae Grote	**CHECKERSPOTS AND CRESCENTS**
___ *Chlosyne gorgone* (Hübner)	GORGONE CHECKERSPOT
a) *carlota* (Reakirt)	
___ *Chlosyne nycteis* (Doubleday)	SILVERY CHECKERSPOT
a) *nycteis*	
___ *Chlosyne harrisii* (Scudder)	HARRIS'S CHECKERSPOT
a) *harrisii*	
___ *Phyciodes tharos* (Drury)	PEARL CRESCENT
a) *tharos*	
_ _ *Phyciodes cocyta* (Cramer)	NORTHERN CRESCENT
___ *Phyciodes batesii* (Reakirt)	TAWNY CRESCENT
a) *batesii*	
___ *Euphydryas phaeton* (Drury)	BALTIMORE CHECKERSPOT
a) *phaeton*	
Subfamily Nymphalinae Swainson	**ANGLEWINGS, TORTOISESHELLS, THISTLE BUTTERFLIES AND PEACOCKS**
___ *Polygonia interrogationis* (Fabricius)	QUESTION MARK
= form "umbrosa" (Lintner)	
Polygonia comma (Harris)	EASTERN COMMA
___ *Polygonia satyrus* (W.H. Edwards)	SATYR COMMA
___ *Polygonia faunus* (W.H. Edwards)	GREEN COMMA
a) *faunus*	
___ *Polygonia gracilis* (Grote & Robinson)	HOARY COMMA
a) *gracilis*	
___ *Polygonia progne* (Cramer)	GREY COMMA
___ *Nymphalis vaualbum* ([Denis & Schiffermuller])	COMPTON TORTOISESHELL
a) *j-album* (Boisduval & Leconte)	
___ *Nymphalis antiopa* (Linnaeus)	MOURNING CLOAK
___ *Aglais milberti* (Godart)	MILBERT'S TORTOISESHELL
a) *milberti*	
___ *Vanessa virginiensis* (Drury)	AMERICAN LADY
___ *Vanessa cardui* (Linnaeus)	PAINTED LADY
___ *Vanessa atalanta* (Linnaeus)	RED ADMIRAL
a) *rubria* (Fruhstorfer)	
___ *Junonia coenia* (Hübner)	COMMON BUCKEYE
a) *coenia*	
Subfamily Limenitidinae Behr	**ADMIRALS**
___ *Limenitis arthemis* (Drury)	
a) *arthemis* (Drury)	WHITE ADMIRAL
b) *astyanax* (Fabricius)	RED-SPOTTED PURPLE
___ *Limenitis archippus* (Cramer)	VICEROY
a) *archippus*	

Subfamily **Apaturinae** Boisduval	**EMPERORS**
___ *Asterocampa celtis* (Boisduval & Leconte)	HACKBERRY EMPEROR
a) *celtis*	
___ *Asterocampa clyton* (Boisduval & Leconte)	TAWNY EMPEROR
a) *clyton*	
Subfamily **Satyrinae** Boisduval	**SATYRS AND WOOD-NYMPHS**
___ *Enodia anthedon* A.H. Clark	NORTHERN PEARLY-EYE
___ *Satyrodes eurydice* (Linnaeus)	EYED BROWN
a) *eurydice*	
___ *Satyrodes appalachia* (R.L. Chermock)	APPALACHIAN BROWN
a) *leeuwi* (Gatrelle & Arbogast)	
__ *Megisto cymela* (Cramer)	LITTLE WOOD-SATYR
a) *cymela*	
___ *Coenonympha tullia* (Müller)	COMMON RINGLET
a) *inornata* W.H. Edwards	
___ *Cercyonis pegala* (Fabricius)	COMMON WOOD-NYMPH
a) *nephele* (W. Kirby)	
___ *Erebia mancinus* Doubleday	TAIGA ALPINE
___ *Erebia discoidalis* (W. Kirby)	RED-DISKED ALPINE
a) *discoidalis*	
___ *Oeneis macounii* (W.H. Edwards)	MACOUN'S ARCTIC
___ *Oeneis chryxus* (Doubleday & Hewitson)	CHRYXUS ARCTIC
a) *strigulosa* McDunnough	
b) *calais* (Scudder)	
___ *Oeneis jutta* (Hübner)	JUTTA ARCTIC
b) *ascerta* Masters & Sorensen	
d) *harperi* F.H. Chermock	
___ *Oeneis melissa* (Fabricius)	MELISSA ARCTIC
a) *semplei* Holland	
___ *Oeneis polixenes* (Fabricius)	POLIXENES ARCTIC
a) *beringianus* Kurentzov	
Subfamily **Danainae** Duponchel	**MILKWEED BUTTTERFLIES**
___ *Danaus plexippus* (Linnaeus)	MONARCH
a) *plexippus*	

Moths 2002



Pandorus Sphinx *Eumorpha pandorus* at Wilson Tract, Norfolk County, 30 July 2002 (photo: D. Beadle)

MANY-LINED ANGLE *MACARIA MULTILINEATA* (LEPIDOPTERA: GEOMETRIDAE): NEW TO CANADA AND ONTARIO

by Jeffrey P. Crolla

While inventorying moths on abandoned farmland near the town of Delta, Leeds and Grenville County, Ontario in late June and early July of 2002, I encountered Many-lined Angle *Macaria multilineata* Packard, 1873 for the first time, in small numbers at a mercury vapour and black-lighted sheet. At the time, I assumed that there were likely to be previous records of this species from southern Ontario, but upon consulting references at home some time later, was surprised to find that this appeared to be the first record of *Macaria multilineata* occurring in Canada. This species was not reported from Canada by McGuffin (1972) or from Ontario by Riotte (1992), and Covell (1984) and Wagner *et al.* (2001) reported that *multilineata* occurs only as far north as Massachusetts and Illinois. J. Donald Lafontaine, Canadian National Collection, Ottawa, (pers. comm.) subsequently confirmed that there were no previous records of *multilineata* from Canada. In 2002, I collected single specimens on 30 June and 6 July (Fig. 1) 4.5 km ESE of Delta, Leeds County, Ontario, and saw the species at light in very small numbers on a few other nights in early July. The first specimen listed is deposited in the Canadian National Collection (CNC).

Wagner *et al.* (2001) recently reported that cedars, including Eastern Red Cedar *Juniperus virginiana*, Atlantic White Cedar *Chamaecyparis thyoides* and Northern White Cedar *Thuja occidentalis*, are the hostplants of *Macaria multilineata*. David Wagner (pers. comm.) normally associates this species with Eastern Red Cedar, but it is also locally common in Atlantic White Cedar swamps in New England (Chris Maier pers. comm.). It was reportedly also reared once from Northern White Cedar *Thuja occidentalis* in Connecticut (David Wagner pers. comm.), although it is notable that the range of this cedar lies almost wholly to the north of the known range of *Macaria multilineata*. This record may be in error or at least not a usual host. In the immediate vicinity of the collecting site near Delta, Ontario, there is a very limited amount of Northern White Cedar in low-lying wet areas (mostly mature trees), but the characteristic cedar of this part of Ontario is Eastern Red Cedar, which grows commonly in abandoned pastures in the area, and is found in scattered stands on a dry limestone ridge within a few hundred metres of the collecting site. Attempts will be made in the future to determine the foodplant in eastern Ontario, but it is most likely Eastern Red Cedar. *Macaria multilineata* is also known from Wisconsin where Eastern Red Cedar is the only possible host at most of the known locations (Leslie A. Ferge pers. comm.).

Few geometrid moths are migratory and in fact they are usually fairly weak fliers, closely associated with their hostplants. This seems particularly true of *Macaria* species as noted by Ferguson (1974) and Thomas (2002). *Macaria multilineata* has probably been overlooked in Ontario until now, and it is likely that little light-trapping has been done in appropriate habitat for this species. Harmsen *et al.* (1973) collected for a season on marginal agricultural land over limestone near Glenburnie, Frontenac County, in what, based on their list of species (Ward *et al.* 1974), may have been a similar habitat to that near Delta, but *multilineata* was not reported.

It may be possible that *Macaria multilineata* has recently expanded its range into south-eastern Ontario, but there are no known recent records from adjacent regions that support this (possibly due to lack of

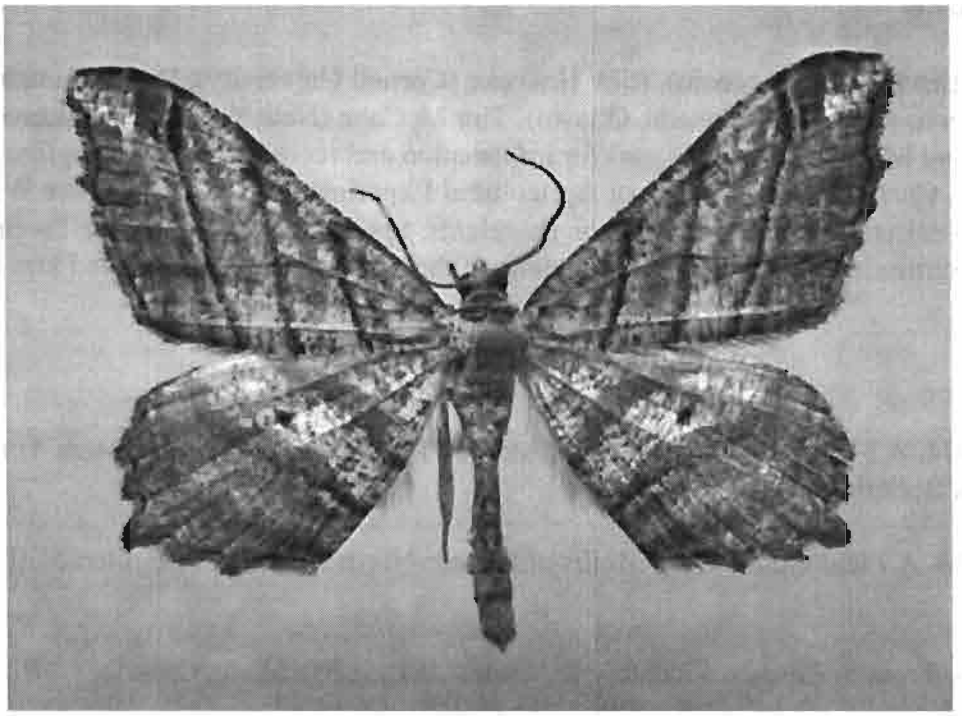


Figure 1. Many-lined Angle *Macaria multilineata*, 6 July 2002, 4.5km ESE of Delta, Leeds County, Ontario (specimen in collection of the author).

collecting), and the species may have been long present but overlooked in other areas as well. The closest records to Canada appear to be from southwestern Wisconsin (Ferge & Balogh 2000) and a single specimen reported by Brower (1974) from Dover, New Hampshire. The species is not yet known from Michigan (Mogens C. Nielsen pers. comm.) and in Ohio is known from few records in the southern part of the state (Eric H. Metzler & Mogens C. Nielsen pers. comm.), including specimens in the Michigan State University collection taken in Greene Co., OH in 1966. The CNC also has specimens from Pennsylvania (J. Donald Lafontaine pers. comm.). Although a thorough search of U.S. collections was not possible, the only records that could be located from New York state were specimens from Long Island in the Cornell University Insect Collection (E. Richard Hoebeke pers. comm.) and there are no specimens of *multilineata* from New York in the New York State Museum (Timothy L. McCabe pers. comm.). The northern limit of *Macaria multilineata* in the northeast as described above closely parallels that of Eastern Red Cedar (ie. Farrar 1995).

Macaria multilineata should be sought in association with Eastern Red Cedar (and possibly Northern White Cedar) in Ontario, and may even be possible in southwestern Quebec where Eastern Red Cedar grows commonly along the Eardley Escarpment, supporting a disjunct population of Juniper Hairstreak *Callophrys gryneus*. Further south *multilineata* flies from spring to fall with two to three broods, and is considered uncommon and local (Covell 1984, Wagner *et al.* 2001). Adults have been recorded in Wisconsin from May to August (Ferge & Balogh 2000). Wagner *et al.* (2001) note that larva can often be found in numbers on the hostplant, and beating for larva may be profitable, particularly where light-trapping is not practical. Adults might also be flushed from the hostplant during the day.

Acknowledgements

Many thanks to Les Ferge (Wisconsin), Rick Hoebeke (Cornell University), Don Lafontaine (Canadian National Collection, Agriculture Canada, Ottawa), Tim McCabe (New York State Museum), Eric Metzler (Ohio) and Mo Nielsen (Michigan) for information and records from their regions of expertise, and to Les Ferge, Chris Maier (Connecticut Agricultural Experiment Station) and Dave Wagner (University of Connecticut) for information on hostplants. Special thanks to Eleanor Toren and Jerry Heath for kind permission to inventory Lepidoptera on their property at Wild Apple Farm near Delta, Ontario.

References

Brower, A.E. 1974. A List of the Lepidoptera of Maine - Part 1 The Macrolepidoptera. University of Maine Technical Bulletin No. 66.

Covell, C.V. 1984. A Field Guide to the Moths of Eastern North America. Houghton Mifflin Co., Boston.

Farrar, J.L. 1995. Trees in Canada. Fitzhenry & Whiteside Ltd., Markham, Ontario.

Ferge, L.A., and G.J. Balogh. 2000. Checklist of Wisconsin Moths (Superfamilies Drepanoidea, Geometroidea, Mimallonoidea, Bombycoidea, Sphingoidea and Noctuiodea). Milwaukee Public Museum Contributions in Biology and Geology No. 93.

Ferguson, D.C. 1974. Moths of the *Semiothisa signaria* complex (Lepidoptera: Geometridae). The Canadian Entomologist 106: 569-621.

Harmsen, R., P.D.N. Hebert and P.S. Ward. 1973. On the Origin of Austral Elements in the Moth Fauna of South-Eastern Ontario, including a number of species new for Canada. Journal of Research on the Lepidoptera 12(3): 127-134.

McGuffin, W.C. 1972. Guide to the Geometridae of Canada (Lepidoptera) II. Subfamily Ennominae I. Memoirs of the Entomological Society of Canada No. 86.

Riotte, J.C.E. 1992. Annotated List of Ontario Lepidoptera. Royal Ontario Museum Life Sciences Miscellaneous Publications.

Thomas, A.W. 2002. Moth Diversity In a Northeastern, North American, Red Spruce Forest. II. The Effect of Silviculture Practices on Geometrid Diversity (Lepidoptera: Geometridae). Canadian Forest Service - Atlantic Forestry Centre Information Report M-X-213E.

Wagner, D.L., D.C. Ferguson, T.L. McCabe and R.C. Reardon. 2001. Geometroid Caterpillars of Northeastern and Appalachian Forests. United States Department of Agriculture.

Ward, P.S., R. Harmsen and P.D.N. Hebert. 1974. An Annotated Checklist of the Macroheterocera of South-Eastern Ontario. Journal of Research on the Lepidoptera 13(1): 23-42.

THE METALMARK MOTHS (LEPIDOPTERA: CHOREUTIDAE) OF ONTARIO

by Jason J. Dombroskie

Introduction

The Choreutidae is a relatively small family with a worldwide distribution. Hodges (1983) records 29 species in North America, although a more recent checklist compiled by Pohl (2003) lists 32 species. Riotte (1992) records six species in Ontario; however, the Canadian National Collection in Ottawa includes nine species from Ontario and one other species in nearby Pennsylvania.

There are two currently recognized subfamilies based on larval morphology - the Millerinae that in North America is only known from Florida, and the Choreutinae (Kristensen 1999). The adults are small (wingspan ca. 1 cm or less) and are called Metalmark Moths because many species have metallic markings on the wings. They can be recognized in our fauna by the following combination of characters: 1) proboscis scaled at base, 2) relatively broad forewing and hindwing, 3) slightly ascending labial palps, 4) vein CuP present near the termen, 5) lacking tympanal organs, and 6) large ocelli (Kristensen 1999). The adults appear somewhat tortricid-like with their broad wings, but rest with the wings flared out from the body as in *Choreutis* (Fig. 1) and sometimes this field character will be coupled with the apical area of the forewing drooped, giving it an inflated appearance as in *Prochoreutis* and *Tebenna*.

Adults are mostly diurnal, though individuals of *Choreutis diana* and *C. pariana* are occasionally recorded at light. They frequent flowers during the day. Larvae are solitary leaf rollers, skeletonizers, or borers, sometimes producing extensive webbing.

The only pest species in the Ontario choreutid fauna is the Apple-and-thorn Skeletonizer *Choreutis pariana*, a minor pest on apple (Covell 1984). Choreutids are poorly represented in most collections, and are rarely reported by naturalists. Similarly, they have been missed from biological inventories, even when the Lepidoptera were surveyed thoroughly (as in Skevington *et al.* 2001).

Key to the Adult Choreutidae of Ontario

A key is presented below that will differentiate all species but two and coupled with the accompanying photographs should allow for the identification of practically all of the choreutids encountered in Ontario.

Abbreviations used in key:

AM = antemedian
FW = forewing
HW = hindwing
PM = postmedian
ST = subterminal

1. Base of FW and thorax cream, sharply contrasting with rest of FW (Fig. 4) – ***Caloreas leucobasis*** **(Dyar)**
- Base of FW always with at least with some darker colour, thorax not cream – 2
2. FW cream with heavy brown scaling, PM line thin, cream, with two outward bulges, and with heavier brown shading along inside; brown AM line diffuse, with sharp outward bulge in middle; HW brown with cream spot or line near anal angle (Fig. 3) – ***Anthophila alpinella*** **(Busck)**
- FW not cream with heavy brown scaling, if brown areas present, then not as diffuse, usually only in obvious bands; with or without cream spot near anal angle of HW – 3
3. FW with white triangle between PM and ST lines on costa, PM line metallic and with sharp bulge in lower half; lacking metallic spots at anal angle of FW, but with metallic markings elsewhere; HW with white or silver spot near anal angle – 4.
- FW without white triangle between PM and ST lines on costa, if a faint one then with metallic spots at anal angle; if PM line obscure, or broad with bulge near middle of FW, not metallic; HW with or without white or silver mark near anal angle – 5
4. Thin, white terminal line visible near anal angle of FW; white or silver spot near anal angle of HW about half as wide as long (Fig. 7); northern Ontario – ***Prochoreutis*** **new species**
- Terminal line only clear on apical half of FW, orange; silver spot near anal angle of HW much less than half as wide as long (Fig. 8); southern Ontario – ***Prochoreutis inflatella*** **(Clemens)**
5. FW with metallic spots near anal angle, usually with broad AM and PM lines – 6
- FW without metallic spots, AM and PM lines if visible not broad, often mottled – 9
6. Metallic spots of FW mainly in dark brown median band; HW greyish brown with distinctive spot near anal angle – 7
- Metallic spots of FW not in median band, median band if present paler brown; HW with spots at anal angle indistinct or absent – 8
7. FW ground colour yellowish brown, HW greyish brown; found throughout southern Ontario west to Thunder Bay (Fig. 12) – ***Tebenna onustana*** **(Walker)**
- FW ground colour chocolate brown, HW dark greyish brown; western species only known from Thunder Bay (Fig. 11) – ***Prochoreutis sororculella*** **(Dyar)**
8. FW with gently curved white AM line, followed by brown median band; HW dark brown (Fig. 10); northern Ontario – ***Caloreas*** **new species**
- FW with straight AM line, followed by dark straw-coloured median band (Fig. 9); HW straw-coloured; possible in extreme western and southwestern Ontario – ***Prochoreutis extrincicella*** **(Dyar)** (not yet recorded from Ontario)
9. FW mostly brownish with a coppery sheen when fresh, terminal line dark brown, often complete, center of wing mostly smudged brown, rarely mottled, sometimes with dark brown AM and ST lines, other lines may be scarcely visible (Fig. 6); associated with apple and hawthorn – ***Choreutis pariana*** **(Clemens)**
- Variable; FW mottled, usually greenish, rarely brownish, lower part of PM line usually most distinctive of all lines, but most other lines usually visible (Figs. 1, 5); associated with aspen – ***Choreutis diana*** **(Hübner)**

Figure 1. *Choreutis diana* in typical resting position

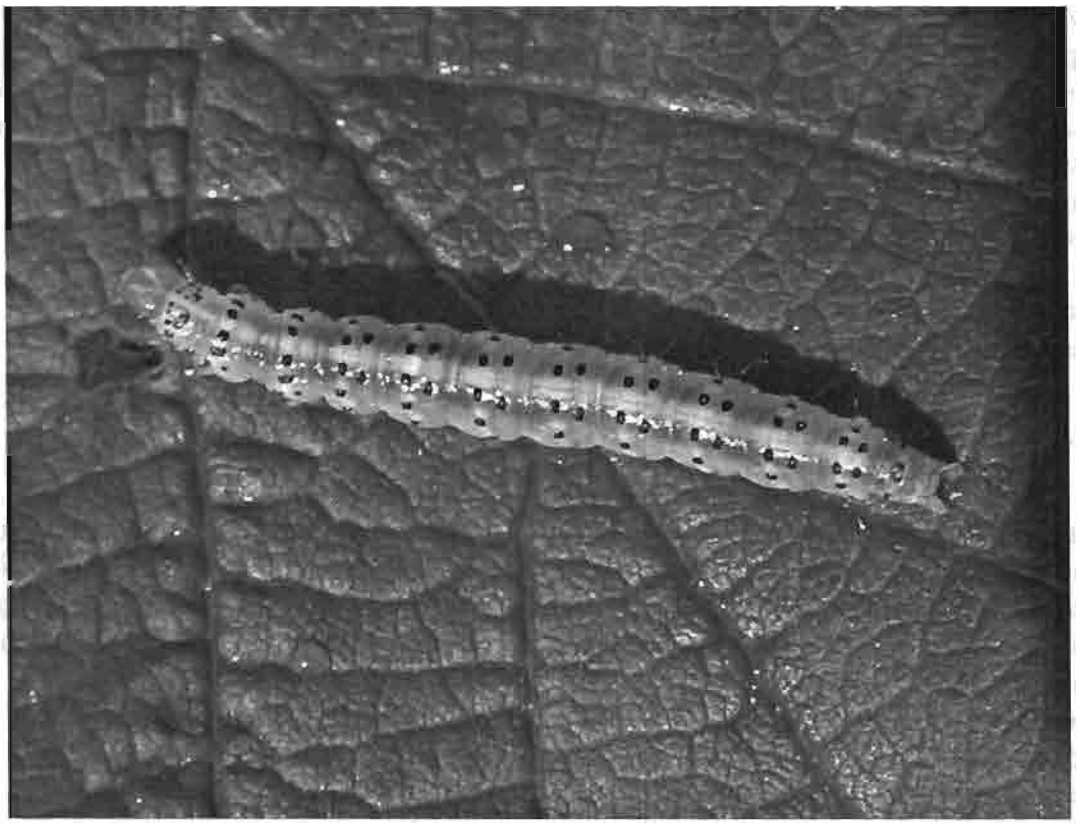


Figure 2. larva of *Choreutis diana* on Speckled Alder *Alnus incana*

Species Accounts

The following information is based on specimens in the Canadian National Collection, Royal Ontario Museum Collection, University of Guelph Collection, Algonquin Park Collection, and personal collections.

Anthophila alpinella (Busck, 1904) – Fig. 3, Map 1

= *Simaethis fabriciana* (Forbes 1923)

Description: FW cream with heavy brown dusting, more solid brown shading present in AM line, inner edge of PM line and terminal area; AM line with sharp outward jut in middle, PM line cream, most obvious at apex, with sharp outward jut above middle and smaller jut below it; fringe white with brown at anal angle, middle, and apex. HW even brown, slightly darker towards outer margin, with white spot or line near anal angle and mostly white fringe. Head and thorax same as ground colour of FW, abdomen even brown, paler at end of each segment.
Ontario Distribution: Ottawa.
Flight period: Adult from 2 June – 1 July, 3 September. Larva in April, July, and August (Forbes 1923).
Host plant: The larva forms a web at the tip of a leaf of *Urtica* (Forbes 1923).
Specimens examined: 12.
Notes: A Palaearctic sibling species, *Anthophila fabriciana,* occurs in Europe (Forbes 1923).

Caloreas new species – Fig. 10, Map 2

Description: FW very pale greyish, with broad light brown basal area, median band, and terminal band; AM line broad, gently bulged outward; two or three columns of squared black spots at anal angle in pale PM area and arranged in a square or triangle; small brown streaks on the veins and a brown spot are present above black spots, but may be indistinct; metallic markings visible in black spots, along terminal line, and in median band; fringe drab greyish. HW even drab grey with a paler fringe. Body drab greyish brown, thorax light brown.
Ontario Distribution: Moose Factory, Ogoki, and Smoky Falls.
Flight period: 14 – 29 June.
Host plant: Unknown.
Specimens examined: 3.
Notes: This species is currently being described by Heppner (J. B. Heppner, pers. comm.).

Caloreas leucobasis (Dyar, 1900) – Fig. 4, Map 3

= *Choreutis leucobasis* (Forbes 1923; Smith 1903)

Description: FW with distinctive cream base, beyond base heavily marked with black spots and bluish scaling, median area and terminal line with chocolate brown shading, some cream visible in PM area; fringe brownish. HW warm brown, slightly darker toward outer margin, fringe paler brown. Head and thorax cream, abdomen brown with light scales at end of each segment.
Ontario Distribution: Hamilton, Ottawa.
Flight period: 15 May, 4 – 9 July
Host plant: Unknown
Specimens examined: 5.

***Choreutis diana* (Hübner, 1819) – Figs. 1, 2 (larva), 5, Map 4**

= *Orchemia diana* (Smith 1903)

= *Simaethis diana* (Forbes 1923)

Description: Variable. FW mottled, often with some green or bluish-green visible; AM line black, strongly jagged, broadest at costa, followed by pale greenish to white; median area pale to dark olive to olive brown; PM line black, often only visible as two sharp black teeth on lower half; PM area mottled cream with brown to olive; subterminal line black, sometimes very distinct; terminal line usually reddish brown with a thin dark brown outer border; fringe pale greyish with dark brown at anal angle, middle, and apex. HW chocolate brown, slightly darker towards outer margin; with a thin dark brown border along outer margin; fringe pale grey, darker on outside. Head and thorax grey to greenish, abdomen brown.

Ontario Distribution: Algonquin Park, Barry's Bay, Glenburnie, Low Bush, Ogoki, Ottawa, Petawawa, Temagami, Thunder Bay, Trenton.

Flight period: 18 April – 11 May, 16 June, 13 July, 26 July – 14 September. Larva mid June – late July, pupa in July (Prentice 1965).

Host plant: A solitary leafroller, found under a web on the upper surface of a leaf (Forbes 1923) on *Alnus rubra* (in the west), *Betula papyrifera, Populus balsamifera, Salix,* and *Prunus* (Prentice 1965; Ives & Wong 1988). Found on *Alnus incana* in Nipissing District (pers. obs.) (see Fig. 2).

Specimens examined: 48.

Notes: This is one of our most commonly encountered choreutids. Adults come to flowers of *Solidago* sp. (pers. obs.). The highly variable pattern can make some specimens difficult to determine, but if it is mottled-looking, does not have metallic markings, or the pattern of *A. alpinella* or *C. pariana*, then it is most likely this species.

***Choreutis pariana* (Clerck, 1759) – Fig. 6, Map 5**

Apple-and-thorn Skeletonizer

= *Simaethis pariana* (Forbes 1923)

Description: FW pale smeared brown, with a coppery sheen when fresh, inner half and terminal area usually darker brown; AM line dark brown and jagged, usually only upper two thirds distinctive; PM line less obvious, paler brown, jagged and usually only upper two thirds obvious; occasionally other lines visible, but never as obvious as AM line; four small whitish rectangles more or less visible along costa at AM line, median, PM line, and most obvious ST line; fringe brown with two thin pale patches along outer edge on either side of middle. HW warm brown, slightly darker towards outer margin; fringe brown, paler at anal angle and apex. Body dark brown.

Ontario Distribution: Collingwood, Glenburnie, Greensville, Grimsby, Guelph, Ingersoll, Ogoki, Ottawa, Perth Road, St. Davids, Simcoe, Toronto, Vineland Station.

Flight period: 6 April, 6 – 29 June, 1 August – 25 September, 14 November. Prentice (1965) gives the adult flight period as late July to late October. Larva June – early September, pupa June – September (Prentice 1965).

Host plant: A solitary leafroller and colonial feeder on *Malus pumila, Crataegus, Betula papyrifera*, and *Salix* (Prentice 1965; Covell 1984); in Palaearctic also on *Prunus, Sorbus, Crataegus, Fraxinus, Rosa,* and *Alnus* (Savella 2001).

Specimens examined: 36.

Notes: This species was introduced from Europe to New England in 1917 (Covell 1984) and is frequently collected in agricultural areas.

***Prochoreutis* new species – Fig. 7, Map 6**

Description: The single worn specimen examined appeared similar to *P. inflatella*, but had the terminal line white and mainly visible on the lower half of the FW, the spot near the anal angle of the HW was broader and may not be metallic, and was slightly larger and longer winged. Overall it appeared much paler, but this may be due to the specimen being worn. Other markings were obscured, but appeared to match up with *P. inflatella*.
Ontario Distribution: Biscotasing.
Flight period: 28 July.
Host plant: Unknown.
Specimens examined: 1.
Notes: This species is currently being described by Heppner (J. B. Heppner, pers. comm.).

***Prochoreutis extrincicella* (Dyar, 1900) – Fig. 9**
= *Choreutis extrincicella* (Forbes 1923; Smith 1903)

Description: FW pale straw yellow, with pale brown basal area, median area, and terminal line; AM line ground colour, broad and relatively straight; black spots present in oblong patch near anal angle in pale PM area, with small subterminal black dot above; faint blackish dusting along veins of upper PM area; metallic spots present in black spots and in two areas on ST line; fringe straw with some brown on outer edge. HW very pale drab yellow, fringe near white. Body very pale brown.
Ontario Distribution: Possible – not recorded from the province but this species may range into western or extreme southwestern Ontario.
Flight period: June (Forbes 1923).
Host plant: Unknown.

***Prochoreutis inflatella* (Clemens, 1863) – Fig. 8, Map 7**
= *Choreutis inflatella* (Forbes 1923; Smith 1903)

Description: FW dark brown with heavy whitish dusting; basal area and PM area drab orange, sometimes reddish; AM line metallic silver, sharply bent outwards, but usually obscure; PM line metallic silver and sharply bent outwards in lower half; ST line also metallic silver, usually only visible on upper half; white triangle present on cost between PM and ST lines; fringe pale with dark brown base. HW brown, darker towards outer margin; metallic silver line near anal angle long and thin. Body dark brown.
Ontario Distribution: Algonquin Park, Almonte, Bobcaygeon, Constance Bay, Cornwall, Lyn, Ottawa, Rondeau Provincial Park, Toronto (Forbes 1923), Trenton.
Flight period: 16 June – 9 July, 4 August – 26 September.
Host plant: The larva skeletonizes the leaves of *Scutellaria lateriflora* in slight webbing, bending the leaf upwards and the edges together.
Specimens examined: 25.

Notes: This is one of our most commonly encountered choreutids. Adults observed flying among patches of *Impatiens capensis* (pers. obs.).

***Prochoreutis sororculella* (Dyar, 1900) – Fig. 11, Map 8**
= *Choreutis sororculella* (Smith 1903)

Description: The single specimen examined was worn and appeared nearly identical to *Tebenna onustana* but both the FW and HW were a more chocolate brown. The black spots may be arranged differently, but this could not be determined with certainty from the specimen.
Ontario Distribution: Thunder Bay.
Flight period: 19 July.
Host plant: Unknown.
Specimens examined: 1.
Notes: Specimens resembling this species and *T. onustana* from northwestern Ontario should be retained for expert determination.

***Tebenna onustana* (Walker, 1864) – Fig. 12, Map 9**
= *Choreutis onustana* (Forbes 1923; Smith 1903)

Description: FW yellowish brown with broad, white, gently curved AM and PM lines; black spots present in brown median and ST areas, only the spot at the anal angle in white PM line, largest spot in outer middle of median band; metallic markings present in all the black spots; small square white spot usually present in upper median area surrounded by metallic/black dots; terminal line thin, white, and broken; fringe similar to ground colour, but paler on outer edge. HW greyish brown with white dash near anal angle; outer margin with thin dark brown border; fringe pale at base and darker on outer two thirds. Head and thorax similar to ground colour of FW, abdomen greyish brown with paler scales at end of each segment.
Ontario Distribution: Algonquin Park, Bells Corners, Black Rapids*, Bobcaygeon, Burk's Falls*, Crown Point*, Delta, Merivale, Ottawa, Singhampton, Thunder Bay (* not included in distribution map).
Flight period: 2 June – 25 June, 14 July – 24 August.
Host plant: Unknown. The larva of *Tebenna gnaphaliella* (Kearfott) is a leafminer then web maker on *Antennaria* and *Gnaphalium obtusifolium*, while *T. carduiella* (Kearfott) is social and bores in the pith of the stems of *Carduus* (Forbes 1923).
Specimens examined: 31.
Notes: Adults found on flowers of *Chrysanthemum leucanthemum* and *Ranunculus acris* in a wet meadow in June (Jeff Crolla pers. comm.).

Figure 3. *Anthophila alpinella*

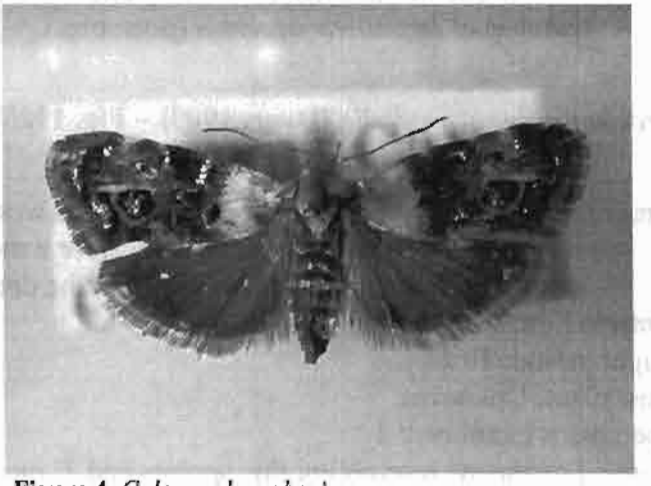


Figure 4. *Caloreas leucobasis*

Figure 5. *Choreutis diana*

Figure 6. *Choreutis pariana*

Figure 7. *Prochoreutis* new species

Figure 8. *Prochoreutis inflatella*

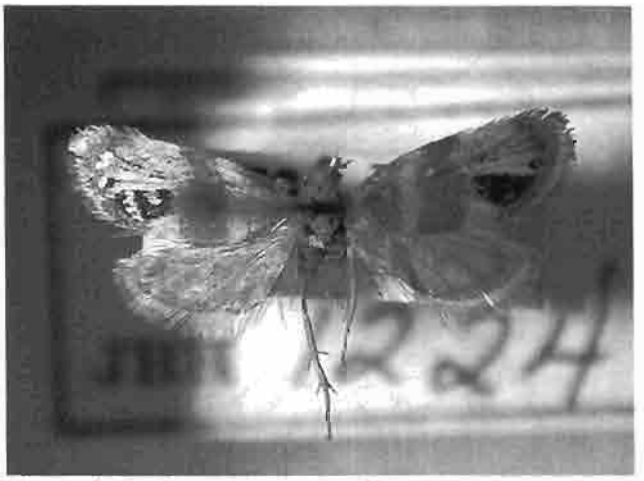


Figure 9. *Prochoreutis extrincicella*

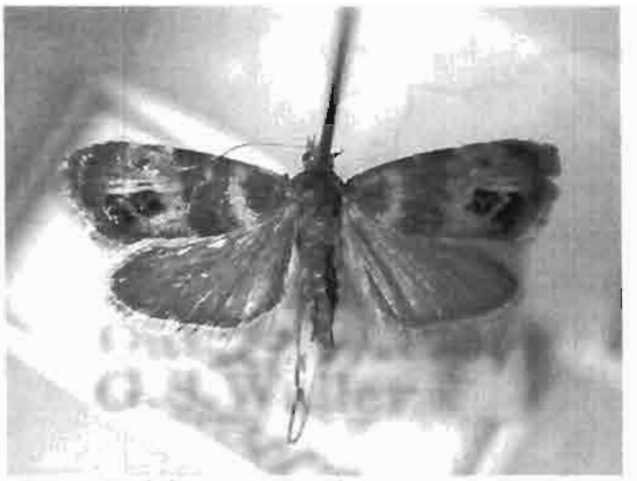


Figure 10. *Caloreas* new species

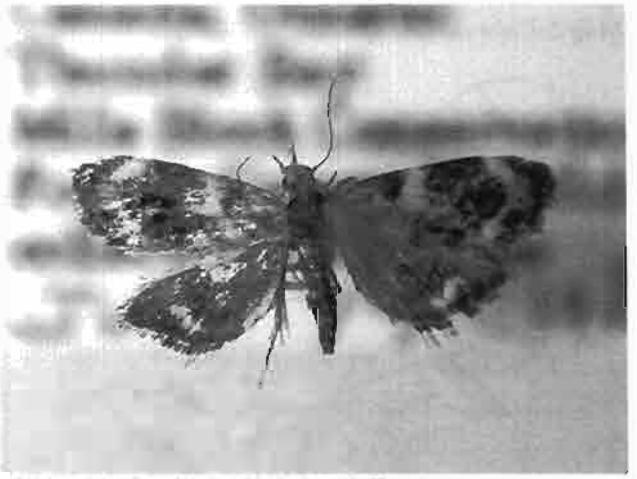


Figure 11. *Prochoreutis sororculella*

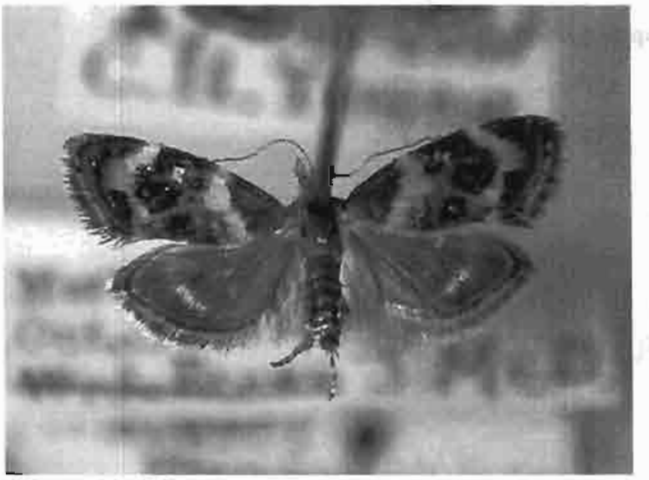


Figure 12. *Tebenna onustana*

Map 1. *Anthophila alpinella*

Map 2. *Caloreas* new species

Map 3. *Caloreas leucobasis*

Map 4. *Choreutis Diana*

Map 5. *Choreutis pariana*

Map 6. *Prochoreutis* new species

Map 7. *Prochoreutis inflatella*

Map 8. *Prochoreutis sororculella*

Map 9. *Tebenna onustana*

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References

Covell, C.V., Jr.1984. A Field Guide to the Moths of Eastern North America. Houghton Mifflin Company, Boston.

Forbes, W.T.M. 1923. Lepidoptera of New York and Neighboring States, Part I, Primitive forms, Microlepidoptera, Pyraloids, Bombyces. Cornell Agricultural Experimental Station Memoir 68.

Hodges, R.W., T. Dominick, D.R. Davis, D.C. Ferguson, J.G. Franclemont, E.G. Munroe, and J.A. Powell. 1983. Checklist of the Lepidoptera of America North of Mexico. E.W. Classey Ltd., London.

Ives, W.G.H. & H.R. Wong. 1988. Tree and Shrub Insects of the Prairie Provinces. Northern Forestry Centre, Information Report NOR-X-292, Edmonton.

Kristensen, N.P. 1999. Handbook of Zoology, Vol. IV Arthropoda: Insecta Part 35, Lepidoptera, Moths and Butterflies Vol. 1: Evolution, Systematics, Biogeography. Walter de Gruyter, Berlin.

Pohl, G. 2003. Checklist of Microlepidoptera of North America. Website: http://nofc.cfs.nrcan.gc.ca/biodiversity/en/faunistics/faunistics_e.html

Prentice, R.M. 1965. Forest Lepidoptera of Canada, Microlepidoptera. Canadian Department of Forestry Publication 1142, Ottawa.

Riotte, J.C.E. 1992. Annotated List of Ontario Lepidoptera. Royal Ontario Museum Life Sciences Miscellaneous Publication, Toronto.

Savella, M. 2001. Lepidoptera and some other life forms. Website: http://www.funet.fi/pub/sci/bio/life/intro.html.

Smith, J.B. 1903. Check List of the Lepidoptera of Boreal America. American Entomological Society, Philadelphia.

Skevington, J., D. Caloren, K. Stead, K. Zufelt, & J. Connop. 2001. Insects of North Lambton. LambtonWildlife Incorporated, Sarnia, Ontario.

NOTEWORTHY MOTHS IN ONTARIO 2002

Compiled by Jeffrey P. Crolla

Introduction

The following is a selection of noteworthy moth records reported in Ontario in 2002. The emphasis is on species that are new, unusual, or rare in the province, as well as species (not necessarily rare) that are infrequently reported or poorly known, regionally or in Ontario as a whole. Notable migrants in 2002 are also included. All records received for three popular and well-recorded groups of large moths (Saturniidae, Sphingidae, and *Catocala*) and a few other large striking species (ie. Great Tiger Moth *Arctia caja*) are included, as well as for some groups of large and distinctive microlepidoptera (ie. Hepialidae, Cossidae, and Sesiidae). Some notable records from earlier years not received until 2002 are also included.

For each species, records are listed chronologically (regardless of location) to allow quick assessment of first and last dates, and of the progression of the flight season as a whole for well-reported species. Species are listed in taxonomic order following Hodges *et al.* (1983) but classification and nomenclature have been updated, largely following Handfield *et al.* (1997) and Handfield (2002). In some groups (particularly microlepidoptera) this disrupts the order followed in Hodges, but species are still identified by their Hodges number. The first entry for each species has the Hodges number and species name in bold.

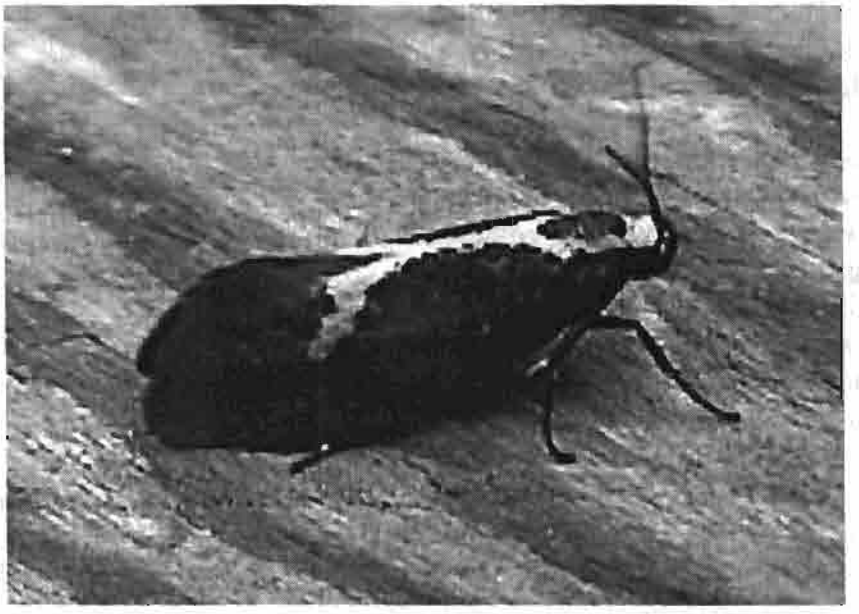
Data included for each record are (from left to right) **Hodges number, species scientific name, county, locality, date, observer(s), numbers seen, voucher collected or photographed, and collecting method.** Observers are identified by initials and counties by a four letter county code (see keys at the front of this issue and on the CD). Other abbreviations used in the moth summary are shown at right. Comments appear immediately **below** the species to which they apply, and first county records, range extensions, and other significant new information are noted where enough information is available to be reasonably sure this is the case. Other valuable data such as georeferencing (UTM or Lat/Long) information, that could not be included here due to space limitations, is retained in the TEA's Ontario Moth Records Database; further inquiries or requests for information can be directed to the compiler.

CODE	MEANING
Method Codes	
MV	Mercury Vapour Light
BL	Black Light
UV	Other Ultraviolet Light
IL	Incandescent Light
FL	Fluorescent Light
LN	Lantern (ie. Kerosene, Propane)
BT	Sugar or other Bait
DY	Dayflying
DR	Day resting (ie. on tree trunk)
FD	Flushed or "kicked up" in Day
SW	Sweeping vegetation with Net
BE	Beating trees & shrubs for larvae
/	(slash) Used in combination (ie. MV/BL)
,	(comma) Used in addition to (ie. MV, DY)
EDT	Eastern Daylight Savings Time
EST	Eastern Standard Time
Number & Life Stage Codes	
M	Male
F	Female
/+	"or more" (ie. 10/+)
EGG	Egg(s)
CAT	Larva(e) (or caterpillar(s))
PUP	Pupa(e)
PEX	Pupal Exuviae (cast off pupal shell)
Voucher Codes	
C	Voucher specimen(s) Collected
P	Voucher specimen(s) Photographed

Data has been carefully checked by the compiler and every effort has been made to verify records and examine vouchers for new or provincially rare and unusual species, as well as species in some particularly difficult groups. However, the majority of records are unverified reports and occasional identification errors may remain. Any corrections brought to the compiler's attention will be published in future issues of *Ontario Lepidoptera*.

The 2002 Season

Perhaps the most notable feature of the 2002 season was an unseasonably cold spring, with cool conditions persisting from late April through May. While not a bumper year overall, the sheer diversity and numbers of moths nevertheless always guarantees some interesting records. In 2002 these included two species new to Canada and Ontario, **Many-lined Angle *Macaria multilineata*** (Geometridae) and **Waved Black *Parascotia fuliginaria*** (Noctuidae). Second Ontario records of **The Pink-Streak *Faronta rubripennis*** (Noctuidae) and ***Epipaschia superatalis*** (Pyralidae) were also reported. Notable migrants in 2002 included the first Ontario records of **Beet Armyworm *Spodoptera exigua*** (Noctuidae), and a record of **Ailanthus Webworm *Atteva punctella*** (Yponomeutidae) from Dunrobin, west of Ottawa, probably the northern-most occurrence of this species in the province. First county records were obtained for several introduced Palaearctic species (**White Satin Moth *Leucoma salicis***, **Small Clouded Brindle *Apamea unanimis***, **Double Lobed *Apamea ophiogramma***, and most notably **Large Wainscot *Rhizedra lutosa***) reflecting their continued spread in the province. Further details on these and other interesting records can be found in the table on the following pages.



Polix coloradella at Brooklin, Durham Region, 21 July 2002 (photo: D. Beadle)

Family HEPIALIDAE										
31	**Korscheltellus gracilis**	NIPI	Algonquin Prov. Pk., Canisbay Twp., Hemlock Bluff	23	Jul	2002	JJD, DT	1	C, P	
Family PSYCHIDAE										
435	**Taleporia walshella**	NIPI	Algonquin Prov. Pk., Peck Twp., Source Lake Road	17	May	2002	JJD, SRi	1 CAT	C	
	Larva found under bark of dead Black Spruce *Picea mariana* ; adult eclosed 26 May 2002.									
Family YPONOMEUTIDAE										
2401	**Atteva punctella**	OTTA	Dunrobin	25	Jul	2002	DLS	1	P	BL
	First county record and probably the northernmost record in Ontario of this very striking migrant from the south, recorded most years in southern Ontario.									
Family COSMOPTERIGIDAE										
1467	**Euclemensia bassettella**	NORF	Wilson Tract	14	Jul	2002	DB, MK	1		MV
1490	**Cosmopterix gemmiferella**	METR	Toronto	08	Jul	2002	DB	1		MV
Family ETHMIIDAE										
992	**Ethmia zelleriella**	METR	Toronto	12	Jun	2002	JPC	1	C	MV
999	**Ethmia longimaculella**	OTTA	Dunrobin	11	Jun	2002	DLS	1	P	BL
999	Ethmia longimaculella	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
999	Ethmia longimaculella	LEED	Delta	04	Jul	2002	JPC	1		MV/BL
999	Ethmia longimaculella	LEED	Delta	06	Jul	2002	JPC	2	C	MV/BL
999	Ethmia longimaculella	OTTA	Dunrobin	08	Jul	2002	DLS	1	P	BL
999	Ethmia longimaculella	LEED	Delta	09	Jul	2002	JPC	1		MV/BL
999	Ethmia longimaculella	LEED	Delta	11	Jul	2002	JPC	1	C	MV/BL
999	Ethmia longimaculella	OTTA	Dunrobin	28	Jul	2002	DLS	1	P	BL
Family OECOPHORIDAE										
1058	**Polix coloradella**	DURH	Brooklin	21	Jul	2002	DB	1	P	MV
	Also reported in past years from Ottawa & Matachewan. This species was originally described from specimens collected at Muskoka Lake, Muskoka District, in Ontario.									
Family COSSIDAE										
2675	**Acossus centerensis**	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
2675	Acossus centerensis	LEED	Delta	02	Jul	2002	JPC	1		MV/BL
2675	Acossus centerensis	LEED	Delta	03	Jul	2002	JPC	1		MV/BL
2675	Acossus centerensis	LEED	Delta	04	Jul	2002	JPC	1	C	MV/BL
2693	**Prionoxystus robiniae**	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
2693	Prionoxystus robiniae	LEED	Delta	02	Jul	2002	JPC	1	C	MV/BL
Family TORTRICIDAE										
3503	**Croesia semipurpurana**	OTTA	Dunrobin	09	Jul	2000	DLS	1	P	IL
3503	Croesia semipurpurana	OTTA	Dunrobin	22	Jul	2001	DLS	1	P	IL
Family SESIIDAE										
2554	**Synanthedon acerni**	LEED	Delta	30	Jun	2002	JPC	1		MV/BL
2554	Synanthedon acerni	LEED	Delta	05	Jul	2002	JPC	2	C	MV/BL
2554	Synanthedon acerni	LEED	Delta	07	Jul	2002	JPC	1		MV/BL
2554	Synanthedon acerni	METR	Toronto	08	Jul	2002	DB	1		MV
2554	Synanthedon acerni	NORF	Wilson Tract	13	Jul	2002	DB, MK	2		MV
2554	Synanthedon acerni	NORF	Wilson Tract	14	Jul	2002	DB, MK	3		MV
2589	**Podosesia syringae**	NIPI	Algonquin Prov. Pk., Guthrie Twp., Basin Depot	10	Jul	2002	MB, WKG, CPR	1	C	
	First county record. Specimen deposited in Algonquin Park collection.									
Family CHOREUTIDAE										
2650	**Choreutis pariana**	METR	Toronto	19	Sep	2002	JPC	1	C	MV/BL

Family PYRALIDAE

4794	**Eustixia pupula**	NORF	Wilson Tract	13	Jul	2002	DB, MK	3		MV
4794	Eustixia pupula	NORF	Wilson Tract	14	Jul	2002	DB, MK	1		MV
4889	**Dicymolomia julianalis**	METR	Toronto	30	Aug	2002	JPC	1	C	MV/BL
4889	Dicymolomia julianalis	METR	Toronto	20	Sep	2002	JPC	1	C	MV/BL
5017	**Loxostege cererallis**	NORF	Wilson Tract	01	Jun	2002	DB	1		MV
5017	Loxostege cererallis	NORF	Wilson Tract	13	Jul	2002	DB, MK	4		MV
5017	Loxostege cererallis	NORF	Wilson Tract	14	Jul	2002	DB, MK	2		MV
5169	**Hymenia perspectalis**	METR	Toronto	19	Sep	2002	JPC	1	C	MV/BL
	A migrant from the south found in southern Ontario in some years, mainly in September and October.									
5516	**Aglossa pinguinalis**	LEED	Delta	11	Jul	2002	JPC	1	C	indoors
5516	Aglossa pinguinalis	LEED	Delta	12	Jul	2002	JPC	1	C	MV/BL
	First county record. A rare species previously known in Ontario only from Ottawa and Toronto.									
5518	**Aglossa cuprina**	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
5518	Aglossa cuprina	LEED	Delta	05	Jul	2002	JPC	1	C	MV/BL
5552	**Galasa nigrinodis**	NORF	Wilson Tract	14	Jul	2002	DB, MK	1		MV
5552	Galasa nigrinodis	DURH	Oak Ridges Moraine	19	Jul	2002	DB et al.	1		MV
5577	**Epipaschia superatalis**	NORF	Wilson Tract	13	Jul	2002	DB, MK	1	P	MV
	Probably the **SECOND ONTARIO RECORD**. Riotte (1992) lists a previous record from Chatham, Kent County.									
5622	**Galleria mellonella**	METR	Toronto	21	Aug	2002	JPC	1 F	C	MV/BL

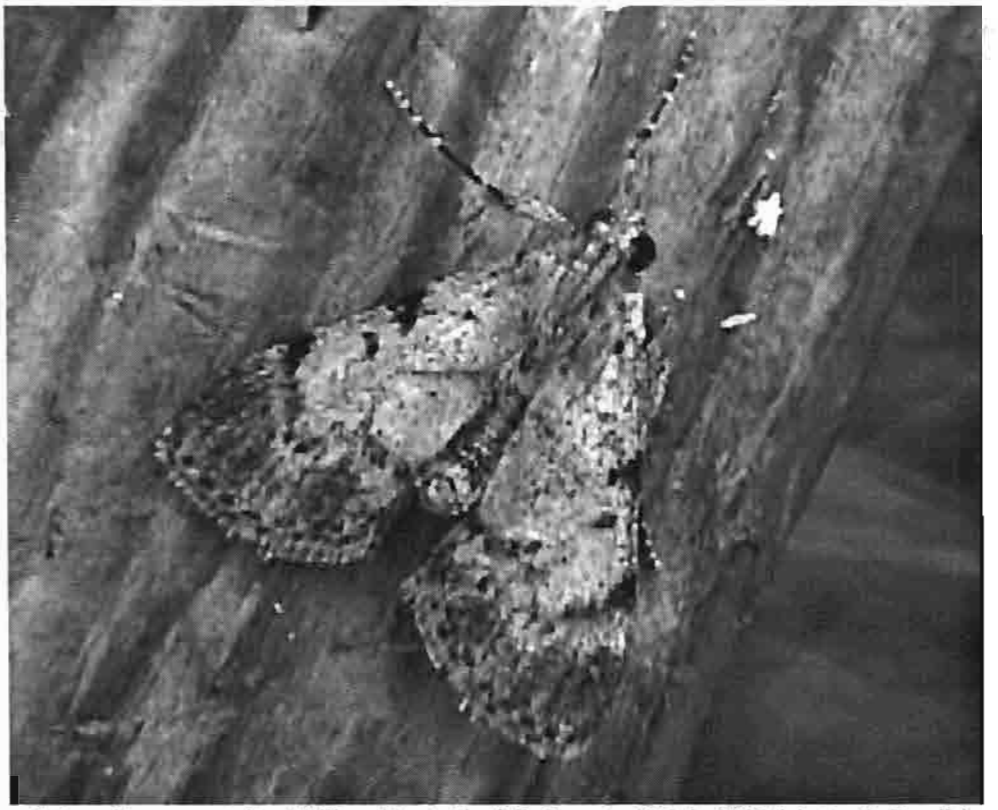
Family GEOMETRIDAE

6353	**Macaria multilineata**	LEED	Delta	30	Jun	2002	JPC	1	C	MV/BL
6353	Macaria multilineata	LEED	Delta	06	Jul	2002	JPC	1	C	MV/BL
	NEW TO CANADA & ONTARIO - see article on p.56.									
6405	**Digrammia gnophosaria**	METR	Toronto, Leslie Street Spit	23	Jul	2000	DB	2	P	MV
6909	**Nepytia pellucidaria**	RENF	Round Lake Centre	07	Sep	2000	JJD	1	P	IL
6909	Nepytia pellucidaria	NIPI	Algonquin Prov. Pk., White Twp., Lake Traverse, road to radio dish near	14	Jul	2001	JJD, JKI	1 CAT	P	
6909	Nepytia pellucidaria	NIPI	Algonquin Prov. Pk., White Twp., Lake Traverse, road to mill site near	12	Oct	2002	CJR, JJD et al.	1	C	

STATUS UNKNOWN - This species is known from few locations in Ontario and was recently suggested by Wagner *et al* . (2001) to be possibly extinct. However, in addition to the Ontario records listed above, *pellucidaria* was recently found in large numbers in New Brunswick by Reginald Webster. Opinions also vary on whether large, northern *pellucidaria* represents a distinct species from a smaller, more southern and as yet undescribed *Nepytia* sp. (found from southern New England to Georgia) or whether apparent differences between the two just represent clinal variation in *pellucidaria* from north to south. In either case, the species is clearly not extinct (Dave Wagner pers. comm.). Records in Ontario are few however, and *pellucidaria* is still worthy of special attention to work out its present status and distribution. It may well be overlooked amongst the more common False Hemlock Looper *Nepytia canosaria* , but can be distinguished by the grey head (there is a yellow patch on the head and on each "shoulder" in *canosaria*). It is also larger than canosaria and has a less contrasting, more evenly grey forewing. Nepytia pellucidaria was previously reported from Renfrew County (riotte 1992) although there had been no recent records until now, and the records from Algonquin Park appear to be the first for Nipissing District. The larva photographed on Jack Pine Pinus banksiana in 2001 is especially noteworthy (see photo on pg. 92).

Family APATELODIDAE

7665	**Olceclostera angelica**	NORF	Wilson Tract	26	Jun	2001	DB, MK, AT	1		MV
7665	Olceclostera angelica	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
7665	Olceclostera angelica	LEED	Delta	09	Jul	2002	JPC	2	C	MV/BL
7665	Olceclostera angelica	NORF	Wilson Tract	13	Jul	2002	DB, MK	1		MV
	This species is a notoriously late-night flier. At Delta, Leeds Co., all individuals appeared on the collecting sheet between 0310h and 0345h EDT.									



Epipaschia superatalis at Wilson Tract, Norfolk County, 13 July 2002 (photo: D. Beadle)

Nepytia pellucidaria at Round Lake Centre, Renfrew County, 7 Sept. 2000 (photo: J. Dombroskie)

Family SATURNIIDAE

7704	**Eacles imperialis pini**		LEED	Delta	09	Jul	2002	JPC	1 M	C	MV/BL
7704	Eacles imperialis pini	done	PETE	Petroglyphs Prov. Pk., maintenance building	09	Jul	2002	DBr	2 M	P	IL
7704	Eacles imperialis pini		LEED	Delta	11	Jul	2002	JPC	1 M dead	C	
7704	Eacles imperialis pini		OTTA	Dunrobin	17	Jul	2002	DLS	1	P	BL/IL
7715	**Dryocampa rubicunda**	done	OTTA	Dunrobin	29	May	2002	DLS	1	P	BL/IL
7715	Dryocampa rubicunda		OTTA	Dunrobin	30	May	2002	DLS	1	P	BL/IL
7715	Dryocampa rubicunda		NORF	Wilson Tract	01	Jun	2002	DB	1		MV
7715	Dryocampa rubicunda		OTTA	Dunrobin	02	Jun	2002	DLS	1	P	BL/IL
7715	Dryocampa rubicunda		OTTA	Dunrobin	05	Jun	2002	DLS	1	P	BL/IL
7715	Dryocampa rubicunda		OTTA	Dunrobin	20	Jun	2002	DLS	1	P	BL/IL
7715	Dryocampa rubicunda		OTTA	Dunrobin	22	Jun	2002	DLS	1	P	BL/IL
7715	Dryocampa rubicunda		LEED	Delta	06	Jul	2002	JPC	1	C	MV/BL
7715	Dryocampa rubicunda		LEED	Delta	08	Jul	2002	JPC	1		MV/BL
7715	Dryocampa rubicunda		NORF	Wilson Tract	13	Jul	2002	DB, MK	8		MV
7715	Dryocampa rubicunda		NORF	Wilson Tract	14	Jul	2002	DB, MK	4		MV
7715	Dryocampa rubicunda		NORF	Wilson Tract	30	Jul	2002	DB, MK	1		MV
7746	**Automeris io**	done	NORF	Wilson Tract	01	Jun	2002	DB	2		MV
7746	Automeris io		OTTA	Dunrobin	09	Jun	2002	DLS	1	P	BL/IL
7746	Automeris io		BRUC	Cape Chin	14	Jun	2002	CR	2		
7746	Automeris io		OTTA	Dunrobin	14	Jun	2002	DLS	2	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	15	Jun	2002	DLS	1	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	16	Jun	2002	DLS	1	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	20	Jun	2002	DLS	1	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	22	Jun	2002	DLS	1	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	25	Jun	2002	DLS	3	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	26	Jun	2002	DLS	2	P	BL/IL
7746	Automeris io		LEED	Delta	01	Jul	2002	JPC	1 M	C	MV/BL
7746	Automeris io		OTTA	Dunrobin	01	Jul	2002	DLS	1	P	BL/IL
7746	Automeris io		LEED	Delta	02	Jul	2002	JPC	1 M		MV/BL
7746	Automeris io		OTTA	Dunrobin	02	Jul	2002	DLS	2	P	BL/IL
7746	Automeris io		LEED	Delta	03	Jul	2002	JPC	3 M		MV/BL
7746	Automeris io		OTTA	Dunrobin	03	Jul	2002	DLS	1	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	04	Jul	2002	DLS	1	P	BL/IL
7746	Automeris io		OTTA	Dunrobin	06	Jul	2002	DLS	1	P	BL/IL
7746	Automeris io		BRUC	Cape Chin	22	Jul	2002	CR	1 M		
7746	Automeris io		BRUC	Cape Chin	21	Aug	2002	CR	2 CAT		
7757	**Antheraea polyphemus**	done	BRUC	Cape Chin	22	Jun	2002	CR	1		
7757	Antheraea polyphemus		OTTA	Dunrobin	25	Jun	2002	DLS	1	P	BL/IL
7757	Antheraea polyphemus		DURH	Brooklin	28	Jun	2002	DB	1		MV
7757	Antheraea polyphemus		DURH	Brooklin	29	Jun	2002	DB	1		MV
7757	Antheraea polyphemus		OTTA	Dunrobin	30	Jun	2002	DLS	1	P	BL/IL
7757	Antheraea polyphemus		LEED	Delta	02	Jul	2002	JPC	3 M	C	MV/BL
7757	Antheraea polyphemus		OTTA	Dunrobin	03	Jul	2002	DLS	1	P	BL/IL
7757	Antheraea polyphemus		LEED	Delta	04	Jul	2002	JPC	2 M, 1 F		MV/BL
7757	Antheraea polyphemus		OTTA	Dunrobin	05	Jul	2002	DLS	1	P	BL/IL
7757	Antheraea polyphemus		LEED	Delta	07	Jul	2002	JPC	1		MV/BL
7757	Antheraea polyphemus		LEED	Delta	08	Jul	2002	JPC	4 M		MV/BL
7757	Antheraea polyphemus		LEED	Delta	09	Jul	2002	JPC	2		MV/BL, DR
7757	Antheraea polyphemus		BRUC	Cape Chin	10	Jul	2002	CR	1		
7757	Antheraea polyphemus		LEED	Delta	10	Jul	2002	JPC	1 M		MV/BL
7757	Antheraea polyphemus		LEED	Delta	11	Jul	2002	JPC	1		MV/BL
7757	Antheraea polyphemus		LEED	Delta	12	Jul	2002	JPC	1		MV/BL
7757	Antheraea polyphemus		NORF	Wilson Tract	13	Jul	2002	DB, MK	3		MV

Imperial Moth *Eacles imperialis pini* at Petroglyphs Provincial Park, Peterborough County, 9 July 2002 (photo: D. Bree)

Tulip-tree Silkmoth *Callosamia angulifera* at Wilson Tract, Norfolk County, 13 July 2002 (photo: D. Beadle)

7757	Antheraea polyphemus	BRUC	Cape Chin	14	Jul	2002	CR	2		
7757	Antheraea polyphemus	BRUC	Cape Chin	15	Jul	2002	CR	1		
7757	Antheraea polyphemus	OTTA	Dunrobin	19	Jul	2002	DLS	1	P	BL/IL
7757	Antheraea polyphemus	OTTA	Dunrobin	20	Jul	2002	DLS	1	P	BL/IL
7757	Antheraea polyphemus	BRUC	Cape Chin	23	Jul	2002	CR	1		
7757	Antheraea polyphemus	BRUC	Cape Chin	24	Jul	2002	CR	1 M		
7757	Antheraea polyphemus	BRUC	Cape Chin	25	Jul	2002	CR	1		
7758	**Actias luna** done	OTTA	Dunrobin	02	Jun	2002	DLS	2	P	BL/IL
7758	Actias luna	OTTA	Dunrobin	03	Jun	2002	DLS	1	P	BL/IL
7758	Actias luna	OTTA	Dunrobin	07	Jun	2002	DLS	2	P	BL/IL
7758	Actias luna	OTTA	Dunrobin	10	Jun	2002	DLS	1	P	BL/IL
7758	Actias luna	OTTA	Dunrobin	13	Jun	2002	DLS	1	P	BL/IL
7758	Actias luna	BRUC	Cape Chin	14	Jun	2002	CR	4		
7758	Actias luna	OTTA	Dunrobin	18	Jun	2002	DLS	1	P	BL/IL
7758	Actias luna	OTTA	Dunrobin	19	Jun	2002	DLS	1	P	BL/IL
7758	Actias luna	OTTA	Dunrobin	20	Jun	2002	DLS	1	P	BL/IL
7758	Actias luna	BRUC	Cape Chin	22	Jun	2002	CR	3		
7758	Actias luna	BRUC	Cape Chin	23	Jun	2002	CR	4		
7758	Actias luna	PARR	Portage Lake (near Lake Joseph)		Jun	2002	DB	1 dead		
7758	Actias luna	OTTA	Dunrobin	03	Jul	2002	DLS	1	P	BL/IL
7758	Actias luna	LEED	Delta	04	Jul	2002	JPC	1 M	C	MV/BL
7758	Actias luna	BRUC	Cape Chin	10	Jul	2002	CR	4		
7758	Actias luna	BRUC	Cape Chin	15	Jul	2002	CR	1		
7764	**Callosamia promethea** done	NORF	Wilson Tract	13	Jul	2002	DB, MK	1 F		MV
7765	**Callosamia angulifera** done	NORF	Wilson Tract	13	Jul	2002	DB, MK	1 M		MV
7767	**Hyalophora cecropia**	OTTA	Dunrobin	31	May	2002	DLS	1	P	BL/IL
7767	Hyalophora cecropia 4	BRUC	Cape Chin	14	Jun	2002	CR	1		
7767	Hyalophora cecropia	BRUC	Cape Chin	24	Jun	2002	CR	1 M	P	
7768	**Hyalophora columbia** 2	BRUC	Cape Chin	24	Jun	2002	CR	1 M	P	

First county record. Attracted to a caged "calling" female *H. cecropia*, along with a single male *cecropia* listed above.

Family SPHINGIDAE

7776	**Manduca quinquemaculatus** ✓	NORF	Wilson Tract	13	Jul	2002	DB, MK	5		MV
7776	Manduca quinquemaculatus	NORF	Wilson Tract	14	Jul	2002	DB, MK	2		MV
7776	Manduca quinquemaculatus	NORF	Wilson Tract	30	Jul	2002	DB, MK	2		MV
7786	**Ceratomia amyntor** 2	METR	Toronto	01	Jul	2002	DB	1		MV
7786	Ceratomia amyntor	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
7786	Ceratomia amyntor	BRUC	Cape Chin	21	Aug	2002	CR	3 CAT		
7786	Ceratomia amyntor	BRUC	Cape Chin	03	Sep	2002	CR	1 CAT		
7787	**Ceratomia undulosa** done	BRUC	Cape Chin	13	Jun	2002	CR	1		
7787	Ceratomia undulosa	BRUC	Cape Chin	14	Jun	2002	CR	1		
7787	Ceratomia undulosa	BRUC	Cape Chin	22	Jun	2002	CR	1		
7787	Ceratomia undulosa	DURH	Brooklin	29	Jun	2002	DB	3		MV
7787	Ceratomia undulosa	LEED	Delta	30	Jun	2002	JPC	2	C	MV/BL
7787	Ceratomia undulosa	LEED	Delta	02	Jul	2002	JPC	1		MV/BL
7787	Ceratomia undulosa	LEED	Delta	04	Jul	2002	JPC	5		MV/BL
7787	Ceratomia undulosa	LEED	Delta	07	Jul	2002	JPC	6		MV/BL
7787	Ceratomia undulosa	LEED	Delta	08	Jul	2002	JPC	8		MV/BL
7787	Ceratomia undulosa	LEED	Delta	09	Jul	2002	JPC	5		MV/BL
7787	Ceratomia undulosa	PETE	Petroglyphs Prov. Pk., maintenance building	09	Jul	2002	DBr	1	P	IL
7787	Ceratomia undulosa	LEED	Delta	11	Jul	2002	JPC	2		MV/BL
7787	Ceratomia undulosa	NORF	Wilson Tract	13	Jul	2002	DB, MK	3		MV
7787	Ceratomia undulosa	HALT	Acton	14	Jul	2002	WDM, IM	1		
7787	Ceratomia undulosa	NORF	Wilson Tract	14	Jul	2002	DB, MK	2		MV
7787	Ceratomia undulosa	BRUC	Cape Chin	15	Jul	2002	CR	2		
7787	Ceratomia undulosa	DURH	Brooklin	20	Jul	2002	DB	1		MV

7787	Ceratomia undulosa	BRUC	Cape Chin	10	Aug	2002	CR	1		
7802	**Sphinx chersis**	BRUC	Cape Chin	10	Jul	2002	CR	3		
7807	**Sphinx canadensis**	BRUC	Cape Chin	22	Jul	2002	CR	1		
7810	**Sphinx gordius - sensu Hodges**	NIPI	Algonquin Prov. Pk., Sproule Twp., Visitor Centre	12	Jun	2002	SRI	1	P	IL
7810	Sphinx gordius - sensu Hodges	LEED	Delta	30	Jun	2002	JPC	1	C	MV/BL
7810	Sphinx gordius - sensu Hodges	LEED	Delta	03	Jul	2002	JPC	1		MV/BL
7810	Sphinx gordius - sensu Hodges	LEED	Delta	04	Jul	2002	JPC	1		MV/BL
7810	Sphinx gordius - sensu Hodges	LEED	Delta	08	Jul	2002	JPC	1		MV/BL
7810	Sphinx gordius - sensu Hodges	LEED	Delta	09	Jul	2002	JPC	1		MV/BL
7810	Sphinx gordius - sensu Hodges	BRUC	Cape Chin	10	Jul	2002	CR	1		

Now considered to be two separate species - the northern *Sphinx poecila* (to which all of the above records are likely referable) and the more southern *Sphinx gordius* , which is known only from extreme southern Ontario. An article on separating these two species in Ontario is planned for a future issue of *Ontario Lepidoptera* .

7817	**Lapara bombycoides**	LEED	Delta	03	Jul	2002	JPC	1	C	MV/BL
7817	Lapara bombycoides	RENF	Round Lake Centre	07	Jul	2002	JJD	1	P	IL
7817	Lapara bombycoides	LEED	Delta	08	Jul	2002	JPC	1		MV/BL
7817	Lapara bombycoides	LEED	Delta	09	Jul	2002	JPC	1		MV/BL
7817	Lapara bombycoides	BRUC	Cape Chin	11	Jul	2002	CR	1		
7817	Lapara bombycoides	NORF	Wilson Tract	13	Jul	2002	DB, MK	10		MV
7817	Lapara bombycoides	HALT	Acton	14	Jul	2002	WDM, IM	1		
7817	Lapara bombycoides	NORF	Wilson Tract	14	Jul	2002	DB, MK	6		MV
7821	**Smerinthus jamaicensis**	NORF	Wilson Tract	01	Jun	2002	DB	1		MV
7821	Smerinthus jamaicensis	BRUC	Cape Chin	14	Jun	2002	CR	1		
7821	Smerinthus jamaicensis	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
7821	Smerinthus jamaicensis	LEED	Delta	02	Jul	2002	JPC	1		MV/BL
7821	Smerinthus jamaicensis	LEED	Delta	08	Jul	2002	JPC	1		MV/BL
7821	Smerinthus jamaicensis	LEED	Delta	09	Jul	2002	JPC	1		MV/BL
7821	Smerinthus jamaicensis	PETE	Petroglyphs Prov. Pk., maintenance building	09	Jul	2002	DBr	1		IL
7821	Smerinthus jamaicensis	BRUC	Cape Chin	13	Jul	2002	CR	1		
7821	Smerinthus jamaicensis	NORF	Wilson Tract	13	Jul	2002	DB, MK	4		MV
7821	Smerinthus jamaicensis	NORF	Wilson Tract	14	Jul	2002	DB, MK	2		MV
7821	Smerinthus jamaicensis	DURH	Brooklin	20	Jul	2002	DB	2		MV
7821	Smerinthus jamaicensis	BRUC	Cape Chin	24	Jul	2002	CR	1		
7822	**Smerinthus cerisyi**	RENF	Round Lake Centre	26	May	2002	JJD	1	P	IL
7822	Smerinthus cerisyi	BRUC	Cape Chin	14	Jun	2002	CR	1		
7822	Smerinthus cerisyi	BRUC	Cape Chin	22	Jun	2002	CR	1		
7822	Smerinthus cerisyi	BRUC	Cape Chin	23	Jun	2002	CR	1		
7822	Smerinthus cerisyi	BRUC	Cape Chin	10	Jul	2002	CR	1		
7824	**Paonias excaecata**	DURH	Brooklin	29	Jun	2002	DB	1		MV
7824	Paonias excaecata	LEED	Delta	30	Jun	2002	JPC	1		MV/BL
7824	Paonias excaecata	LEED	Delta	01	Jul	2002	JPC	1		MV/BL
7824	Paonias excaecata	LEED	Delta	02	Jul	2002	JPC	2	C	MV/BL
7824	Paonias excaecata	LEED	Delta	03	Jul	2002	JPC	2		MV/BL
7824	Paonias excaecata	LEED	Delta	04	Jul	2002	JPC	1		MV/BL
7824	Paonias excaecata	LEED	Delta	06	Jul	2002	JPC	2		MV/BL
7824	Paonias excaecata	LEED	Delta	07	Jul	2002	JPC	4		MV/BL
7824	Paonias excaecata	LEED	Delta	08	Jul	2002	JPC	5		MV/BL
7824	Paonias excaecata	LEED	Delta	09	Jul	2002	JPC	7		MV/BL
7824	Paonias excaecata	BRUC	Cape Chin	10	Jul	2002	CR	2		
7824	Paonias excaecata	LEED	Delta	10	Jul	2002	JPC	1		MV/BL
7824	Paonias excaecata	LEED	Delta	11	Jul	2002	JPC	2		MV/BL
7824	Paonias excaecata	LEED	Delta	12	Jul	2002	JPC	1		MV/BL
7824	Paonias excaecata	BRUC	Cape Chin	13	Jul	2002	CR	1		
7824	Paonias excaecata	BRUC	Cape Chin	15	Jul	2002	CR	1		
7824	Paonias excaecata	BRUC	Cape Chin	25	Jul	2002	CR	1		
7824	Paonias excaecata	NORF	Wilson Tract	30	Jul	2002	DB, MK	8		MV

7825	**Paonias myops**	NORF	Wilson Tract	01	Jun	2002	DB	3		MV
7825	Paonias myops	LEED	Delta	30	Jun	2002	JPC	1		MV/BL
7825	Paonias myops	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
7825	Paonias myops	LEED	Delta	03	Jul	2002	JPC	1		MV/BL
7825	Paonias myops	LEED	Delta	07	Jul	2002	JPC	2		MV/BL
7825	Paonias myops	LEED	Delta	08	Jul	2002	JPC	3		MV/BL
7825	Paonias myops	LEED	Delta	09	Jul	2002	JPC	3		MV/BL
7825	Paonias myops	LEED	Delta	10	Jul	2002	JPC	2		MV/BL
7825	Paonias myops	LEED	Delta	11	Jul	2002	JPC	5		MV/BL
7825	Paonias myops	NORF	Wilson Tract	13	Jul	2002	DB, MK	6		MV
7825	Paonias myops	NORF	Wilson Tract	14	Jul	2002	DB, MK	2		MV
7825	Paonias myops	PETE	Petroglyphs Prov. Pk., staff house	18	Jul	2002	DBr	1	P	IL
7827	**Amorpha juglandis**	LEED	Delta	05	Jul	2002	JPC	1	C	MV/BL
7827	Amorpha juglandis	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
7827	Amorpha juglandis	LEED	Delta	10	Jul	2002	JPC	1		MV/BL
7827	Amorpha juglandis	NORF	Wilson Tract	13	Jul	2002	DB, MK	1		MV
7827	Amorpha juglandis	NORF	Wilson Tract	14	Jul	2002	DB, MK	1		MV
7828	**Pachysphinx modesta**	PETE	Petroglyphs Prov. Pk., staff house	12	Jun	2002	DBr	1		IL
7828	Pachysphinx modesta	BRUC	Cape Chin	13	Jun	2002	CR	3		
7828	Pachysphinx modesta	BRUC	Cape Chin	14	Jun	2002	CR	10		
7828	Pachysphinx modesta	NIPI	Algonquin Prov. Pk., Pentland Twp., Kiosk (ghost town)	20	Jun	2002	JJD et al.	1	P	IL
7828	Pachysphinx modesta	NIPI	Algonquin Prov. Pk., Pentland Twp., Kiosk (ghost town)	21	Jun	2002	JJD, WKG	1	P	IL
7828	Pachysphinx modesta	BRUC	Cape Chin	22	Jun	2002	CR	2		
7828	Pachysphinx modesta	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
7828	Pachysphinx modesta	BRUC	Cape Chin	10	Jul	2002	CR	4		
7828	Pachysphinx modesta	BRUC	Cape Chin	13	Jul	2002	CR	2		
7828	Pachysphinx modesta	NORF	Wilson Tract	13	Jul	2002	DB, MK	5		MV
7828	Pachysphinx modesta	BRUC	Cape Chin	14	Jul	2002	CR	3		
7828	Pachysphinx modesta	NORF	Wilson Tract	14	Jul	2002	DB, MK	3		MV
7828	Pachysphinx modesta	BRUC	Cape Chin	15	Jul	2002	CR	2		
7828	Pachysphinx modesta	DURH	Brooklin	20	Jul	2002	DB	1		MV
7828	Pachysphinx modesta	BRUC	Cape Chin	24	Jul	2002	CR	1		
7828	Pachysphinx modesta	NORF	Wilson Tract	30	Jul	2002	DB, MK	5		MV
7853	**Hemaris thysbe**	NIPI	Algonquin Prov. Pk., Peck Twp., Found Lake staff house	07	Jun	2002	JJD, SBo	1	P	DY
7853	Hemaris thysbe	BRUC	Cape Chin	11	Jul	2002	CR	1		
7853	Hemaris thysbe	HALT	Acton	01	Aug	2002	WDM, IM	1		
7853	Hemaris thysbe	BRUC	Cape Chin	11	Aug	2002	CR	1		
7859	**Eumorpha pandorus**	NORF	Wilson Tract	13	Jul	2002	DB, MK	1		MV
7859	Eumorpha pandorus	NORF	Wilson Tract	14	Jul	2002	DB, MK	1		MV
7859	Eumorpha pandorus	NORF	Wilson Tract	30	Jul	2002	DB, MK	6		MV
7870	**Sphecodina abbottii**	NORF	Wilson Tract	01	Jun	2002	DB	1		MV
7873	**Amphion floridensis**	METR	Toronto	04	Jul	2002	DB	1		DY
7884	**Darapsa versicolor**	LEED	Delta	09	Jul	2002	JPC	1	C	MV/BL
7885	**Darapsa myron**	DURH	Brooklin	30	Jun	2002	DB	2		MV
7885	Darapsa myron	LEED	Delta	30	Jun	2002	JPC	3	C	MV/BL
7885	Darapsa myron	LEED	Delta	01	Jul	2002	JPC	8		MV/BL
7885	Darapsa myron	LEED	Delta	02	Jul	2002	JPC	2		MV/BL
7885	Darapsa myron	LEED	Delta	06	Jul	2002	JPC	3		MV/BL
7885	Darapsa myron	LEED	Delta	07	Jul	2002	JPC	1		MV/BL
7885	Darapsa myron	LEED	Delta	08	Jul	2002	JPC	1		MV/BL
7885	Darapsa myron	LEED	Delta	09	Jul	2002	JPC	4		MV/BL
7885	Darapsa myron	LEED	Delta	10	Jul	2002	JPC	1		MV/BL
7885	Darapsa myron	NORF	Wilson Tract	13	Jul	2002	DB, MK	10		MV

White Satin Moth *Leucoma salicis* at Toronto, Metropolitan Toronto, 2 July 2002 (photo: D. Beadle)

Big Poplar Sphinx *Pachysphinx modesta* at Kiosk, Nipissing District in Algonquin Provincial Park, 21 June 2002 (photo: J. Dombroskie)

7885	Darapsa myron	NORF	Wilson Tract	14	Jul	2002	DB, MK	6		MV
7885	Darapsa myron	NORF	Wilson Tract	30	Jul	2002	DB, MK	6		MV
7886	**Darapsa choerilus (= pholus)**	LEED	Delta	02	Jul	2002	JPC	1	C	MV/BL
7886	Darapsa choerilus (= pholus) dupe	LEED	Delta	07	Jul	2002	JPC	1	C	MV/BL
7886	Darapsa choerilus (= pholus)	LEED	Delta	08	Jul	2002	JPC	1		MV/BL
Family NOTODONTIDAE										
7898	**Clostera strigosa**	NORF	Wilson Tract	30	Jul	2002	DB, MK	6		MV
7926	**Notodonta scitipennis**	LEED	Delta	30	Jun	2002	JPC	1	C	MV/BL
7926	Notodonta scitipennis	DURH	Brooklin	04	Aug	2002	DB	1		MV
7928	**Notodonta simplaria**	DURH	Brooklin	20	Jul	2002	DB	1		MV
7928	Notodonta simplaria	NORF	Wilson Tract	30	Jul	2002	DB, MK	1	P	MV
	First Norfolk County record.									
7983	**Heterocampa obliqua**	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
7983	Heterocampa obliqua	LEED	Delta	02	Jul	2002	JPC	1	C	MV/BL
7983	Heterocampa obliqua	LEED	Delta	09	Jul	2002	JPC	1	C	MV/BL
Family ARCTIIDAE										
8107	**Haploa clymene**	NORF	Wilson Tract	30	Jul	2002	DB, MK	1		MV
	First county record.									
8114	**Holomelina laeta**	LEED	Delta	07	Jul	2002	JPC	1	C	MV/BL
	First county record.									
8118	**Holomelina opella**	LEED	Delta	03	Jul	2002	JPC	1	C	MV/BL
8118	Holomelina opella	LEED	Delta	06	Jul	2002	JPC	1	C	MV/BL
8118	Holomelina opella	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
8118	Holomelina opella	LEED	Delta	11	Jul	2002	JPC	1	C	MV/BL
8146	**Ecpantheria scribonia**	LEED	Delta	30	Jun	2002	JPC	1	C	MV/BL
8146	Ecpantheria scribonia	LEED	Delta	01	Jul	2002	JPC	2	C	MV/BL
8146	Ecpantheria scribonia	LEED	Delta	02	Jul	2002	JPC	1	C	MV/BL
8146	Ecpantheria scribonia	LEED	Delta	04	Jul	2002	JPC	1	C	MV/BL
8146	Ecpantheria scribonia	LEED	Delta	06	Jul	2002	JPC	1	C	MV/BL
8162	**Platarctia parthenos**	BRUC	Cape Chin	10	Jul	2002	CR	1		
8166	**Arctia caja americana**	BRUC	Cape Chin	10	Aug	2002	CR	1		
8166	Arctia caja americana	PETE	Petroglyphs Prov. Pk., maintenance building	10	Aug	2002	DBr	1		IL
8166	Arctia caja americana	PETE	Petroglyphs Prov. Pk., staff house	14	Aug	2002	DBr	1		IL
8166	Arctia caja americana	PETE	Petroglyphs Prov. Pk., maintenance building	16	Aug	2002	DBr	1		IL
8166	Arctia caja americana	PETE	Petroglyphs Prov. Pk., maintenance building	17	Aug	2002	DBr	4		IL
8176	**Grammia anna**	LEED	Delta	01	Jul	2002	JPC	3	C	MV/BL
8176	Grammia anna	LEED	Delta	02	Jul	2002	JPC	1		MV/BL
8176	Grammia anna	LEED	Delta	03	Jul	2002	JPC	1		MV/BL
8176	Grammia anna	LEED	Delta	04	Jul	2002	JPC	1		MV/BL
Family LYMANTRIIDAE										
8319	**Leucoma salicis**	METR	Toronto	02	Jul	2002	DB	1	P	MV
8319	Leucoma salicis	METR	Toronto	03	Jul	2002	DB	1		MV
	First county record.									
Family NOCTUIDAE										
8359	**Macrochilo bivittata**	LEED	Delta	02	Jul	2002	JPC	1	C	MV/BL
8411	**Colobochyla interpuncta**	DURH	Brooklin	08	Jun	2002	DB	1		MV
8411	Colobochyla interpuncta	METR	Toronto	02	Aug	2002	DB	1		MV

8418	**Parascotia fuliginaria**	DURH	Brooklin, 172 Way Street	26	Jul	2002	DB	1	P	MV

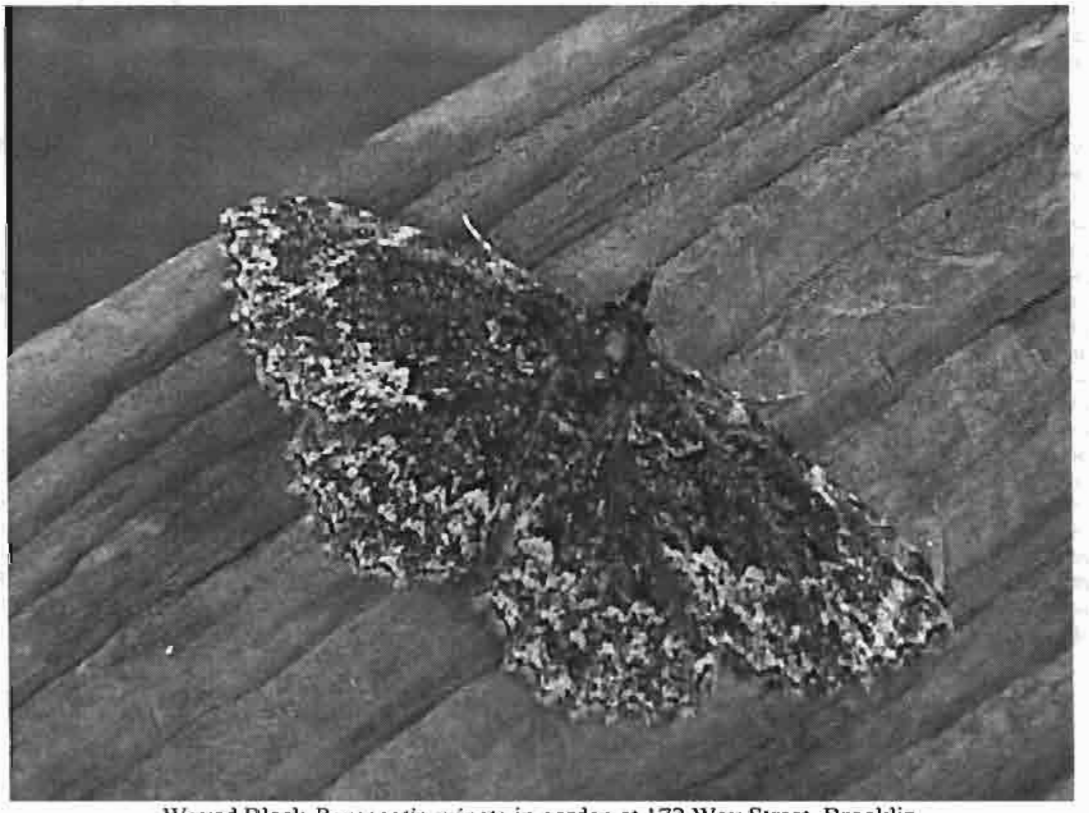
NEW TO CANADA & ONTARIO - This introduced Palaearctic species was first reported in North America by Hodges *et al* . (1983), based on specimens collected by John Franclemont in his garden in Ithaca, New York. Franclemont (Proc. Ent. Soc. Wash., 87: 826-833, 1985) subsequently described North American material as a new species, *Parascotia mineta* , but recent investigations by Don Lafontaine (pers. comm.) prompted by the Canadian record, have revealed that differences in the genitilia and markings of *fuliginaria* and *mineta* as described by Franclemont do not hold up, and North American specimens are indeed introduced *fuliginaria* (*mineta* will be relegated to synonomy). In Britain, Waved Black *Parascotia fuliginaria* feeds on fungi growing on fallen trees and logs, and is considered secretive and easily overlooked; for many years it was unknown outside the London area, though it is now known from a wider area and may even be an occasional migrant (Skinner 1984). The species appears to be similarly elusive in North America and this may be the first record outside the Ithaca area in New York state. Parascotia fuliginaria is variable in appearance with several different forms. It rests with wings held flat and outward from the body and has bipectinate antennae, and may initially suggest a geometrid.

8545/ 8546	**Anomis sp. (erosa or flava fimbriago)**	NORF	Long Point Prov. Pk.	02	Oct	1999	DB	1	P	BT

Both *Anomis erosa* and *Anomis flava fimbriago* are very rare fall migrants to southern Ontario from the tropics; *flava* moves northward more rarely than *erosa* , and is encountered less often even in the southeastern United States (James Adams pers. comm.). They are extremely similar and variable, with both species having light and dark forms, and are difficult to separate even from specimens. Since there are few records for either species in Ontario the above record of an *Anomis* is well worth including here, but unfortunately the species cannot be determined from the photograph (Don Lafontaine pers. comm.). It is to be hoped that more extensive coverage by an increasing number of observers will result in more records for rare and occasional migrant moths in southern Ontario, but in the case of Anomis spp. specimens are required to allow for a positive identification of the species involved.

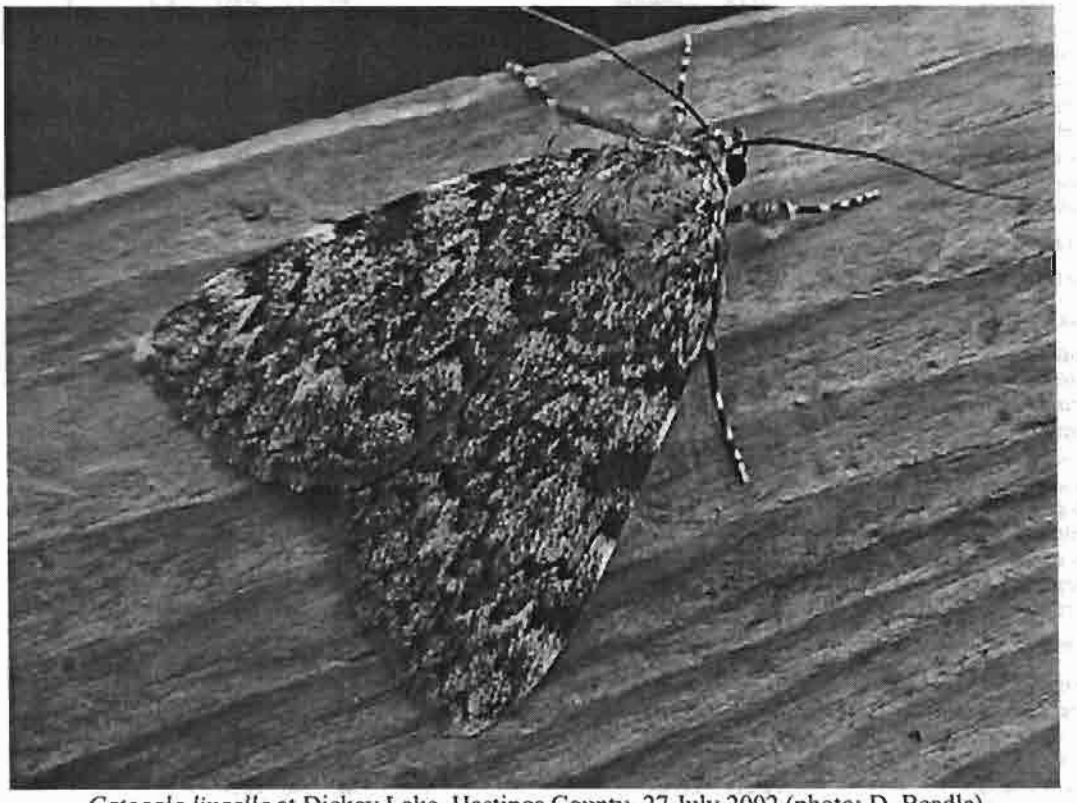
8770	**Catocala innubens**	NORF	Wilson Tract	30	Jul	2002	DB, MK	1		BT
8802	**Catocala cerogama**	NORF	Wilson Tract	30	Jul	2002	DB, MK	2		BT
8802	Catocala cerogama	NIPI	Algonquin Prov. Pk., Peck Twp., Found Lake staff house	09	Aug	2002	JJD	1	P	IL
8803	**Catocala relicta**	NORF	Wilson Tract	30	Jul	2002	DB, MK	1		MV
8803	Catocala relicta	BRUC	Cape Chin	01	Sep	2002	CR	3		
8803	Catocala relicta	BRUC	Cape Chin	02	Sep	2002	CR	1		
8803	Catocala relicta	PETE	Petroglyphs Prov. Pk., petroglyphs site	19	Sep	2002	DBr	1 dead		
8806	**Catocala parta**	NORF	Wilson Tract	30	Jul	2002	DB, MK	2	P	MV, BT
8806	Catocala parta	HALT	Acton	08	Aug	2002	WDM, IM	1		
8806	Catocala parta	METR	Toronto	16	Sep	2002	JPC	1	C	MV/BL
8817	**Catocala brisels**	DURH	Brooklin	20	Jul	2002	DB	2		MV, BT
8833	**Catocala concumbens**	PETE	Petroglyphs Prov. Pk., toilets near senior/handicapped parking lot	01	Oct	2002	DBr	1		
8851	**Catocala coccinata**	LEED	Delta	09	Jul	2002	JPC	1	C	MV/BL
8857	**Catocala ultronia**	NORF	Wilson Tract	30	Jul	2002	DB, MK	8		MV, BT
8857	Catocala ultronia	HALT	Acton	01	Aug	2002	WDM, IM	1		
8857	Catocala ultronia	BRUC	Cape Chin	21	Aug	2002	CR	1		
8857	Catocala ultronia	BRUC	Cape Chin	01	Sep	2002	CR	1		
8858	**Catocala crataegi**	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
8858	Catocala crataegi	LEED	Delta	10	Jul	2002	JPC	1	C	MV/BL
8858	Catocala crataegi	DURH	Brooklin	20	Jul	2002	DB	1		BT
8863	**Catocala mira**	DURH	Brooklin	04	Aug	2002	DB	1		MV
8864	**Catocala grynea**	DURH	Brooklin	26	Jul	2002	DB	4		MV
8864	Catocala grynea	NORF	Wilson Tract	30	Jul	2002	DB, MK	1		MV
8864	Catocala grynea	DURH	Brooklin	04	Aug	2002	DB	15		MV
8864	Catocala grynea	METR	Toronto	11	Aug	2002	JPC	1	C	MV/BL
8867	**Catocala blandula**	DURH	Brooklin	20	Jul	2002	DB	1		BT
8872	**Catocala clintoni**	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
8872	Catocala clintoni	LEED	Delta	09	Jul	2002	JPC	3	C	MV/BL
8872	Catocala clintoni	OTTA	Dunrobin	20	Jul	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	22	Jul	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	28	Jul	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	29	Jul	2002	DLS	1	P	BL/IL

Anomis sp. at bait at Long Point Provincial Park, Norfolk County, 2 Oct. 1999 (photo: D. Beadle)

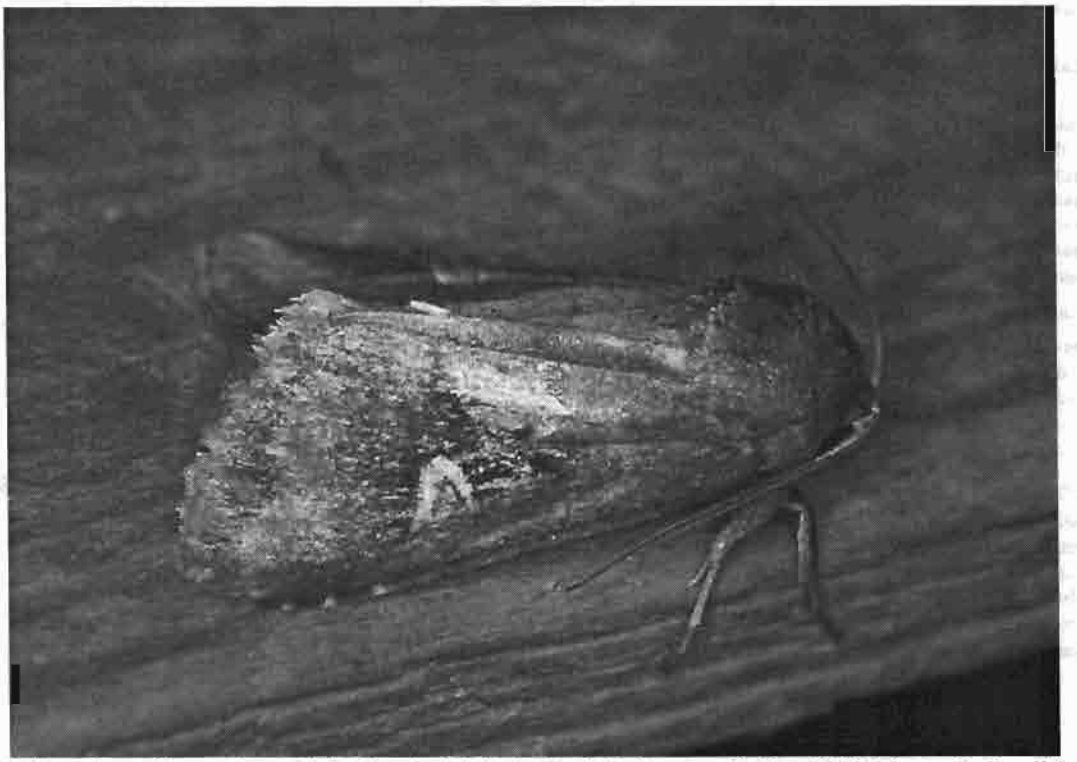


Waved Black *Parascotia mineta* in garden at 172 Way Street, Brooklin, Durham Region, 26 July 2002 (photo: D. Beadle)

8872	Catocala clintoni	OTTA	Dunrobin	30	Jul	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	31	Jul	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	01	Aug	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	02	Aug	2002	DLS	1	P	BL/IL
8872	Catocala clintoni	OTTA	Dunrobin	05	Aug	2002	DLS	1	P	BL/IL
8874	**Catocala minuta** ✓	METR	Toronto	15	Jul	2002	DB	1		MV
8874	Catocala minuta	METR	Toronto	18	Jul	2002	JPC	1	C	MV
8874	Catocala minuta	DURH	Brooklin	26	Jul	2002	DB	1	P	MV
8874	Catocala minuta	METR	Toronto	02	Aug	2002	DB	1		MV
	First Durham County record.									
8878.1	**Catocala lineella** done (as erica)	HAST	Dickey Lake	27	Jul	2002	DB	4	P	MV
	First county record.									
8887	**Trichoplusia ni**	METR	Toronto	13	Aug	2001	JPC	1	C	MV
8887	Trichoplusia ni	METR	Toronto	12	Oct	2002	JPC	1	C	MV/BL
8890	**Pseudoplusia includens**	METR	Toronto	10	Sep	2002	DB	1		MV
8890	Pseudoplusia includens	METR	Toronto	20	Sep	2002	DB	1		MV
8890	Pseudoplusia includens	METR	Toronto	20	Sep	2002	JPC	6	C	MV/BL
8890	Pseudoplusia includens	METR	Toronto	21	Sep	2002	JPC	9		MV/BL
8890	Pseudoplusia includens	METR	Toronto	25	Sep	2002	JPC	1		MV/BL
8890	Pseudoplusia includens	METR	Toronto	26	Sep	2002	JPC	1		MV/BL
8890	Pseudoplusia includens	METR	Toronto	30	Sep	2002	JPC	4		MV/BL
8890	Pseudoplusia includens	METR	Toronto	05	Oct	2002	JPC	1		MV/BL
8890	Pseudoplusia includens	METR	Toronto	06	Oct	2002	JPC	2		MV/BL
	A migrant from the south recorded in fair numbers in September and October in each of the last three years in Toronto.									
8983	**Meganola minuscula**	LEED	Delta	04	Jul	2002	JPC	1	C	MV/BL
8983.2	**Meganola spodia**	LEED	Delta	04	Jul	2002	JPC	1	C	MV/BL
8983.2	Meganola spodia	LEED	Delta	05	Jul	2002	JPC	1	C	MV/BL
8983.2	Meganola spodia	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
8983.2	Meganola spodia	LEED	Delta	09	Jul	2002	JPC	1	C	MV/BL
	First county record. Only recently described in 1985, this species has also been recorded in Ontario at Port Franks and Dunrobin.									
9061	**Cerma cora**	NIPI	Algonquin Prov. Pk., Sproule Twp., Visitor Centre	14	Jun	2002	JJD et al.	1	P	IL
9184	**Colocasia flavicornis**	NIPI	Algonquin Prov. Pk., Peck Twp., Found Lake staff house	30	May	2002	JJD	1	P	IL
9227	**Acronicta laetifica**	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
9227	Acronicta laetifica	LEED	Delta	04	Jul	2002	JPC	1	C	MV/BL
9343	**Apamea apamiformis**	NORF	Wilson Tract	13	Jul	2002	DB, MK	2	P	MV
9344	**Apamea plutonia**	NORF	Wilson Tract	13	Jul	2002	DB, MK	1	P	MV
9351	**Apamea alia**	DURH	Brooklin	28	Jun	2002	DB	1	P	MV
9362.1	**Apamea unanimis**	DURH	Brooklin	28	Jun	2002	DB	3		MV
9362.1	Apamea unanimis	DURH	Brooklin	29	Jun	2002	DB	1		MV
	First county record.									
9364.1	**Apamea ophiogramma**	LEED	Delta	30	Jun	2002	JPC	1	C	MV/BL
9364.1	Apamea ophiogramma	LEED	Delta	11	Jul	2002	JPC	2	C	MV/BL
9364.1	Apamea ophiogramma	NORF	Wilson Tract	13	Jul	2002	DB, MK	3	P	MV
9364.1	Apamea ophiogramma	DURH	Brooklin	19	Jul	2002	DB	6		MV
9364.1	Apamea ophiogramma	DURH	Brooklin	20	Jul	2002	DB	4		MV
	First county records for all three counties. This introduced Palaearctic species was first recorded in Ontario at Ottawa in 1997.									
9374	**Apamea niveivenosa**	DURH	Brooklin	14	Jul	2001	DB	1		MV
9374	Apamea niveivenosa	DURH	Brooklin	26	Jul	2002	DB	1		MV
9374	Apamea niveivenosa	DURH	Brooklin	04	Aug	2002	DB	2		MV
9391	**Luperina passer**	LEED	Delta	30	Jun	2002	JPC	1	C	MV/BL
9391	Luperina passer	LEED	Delta	02	Jul	2002	JPC	1	C	MV/BL
9391	Luperina passer	LEED	Delta	03	Jul	2002	JPC	1	C	MV/BL

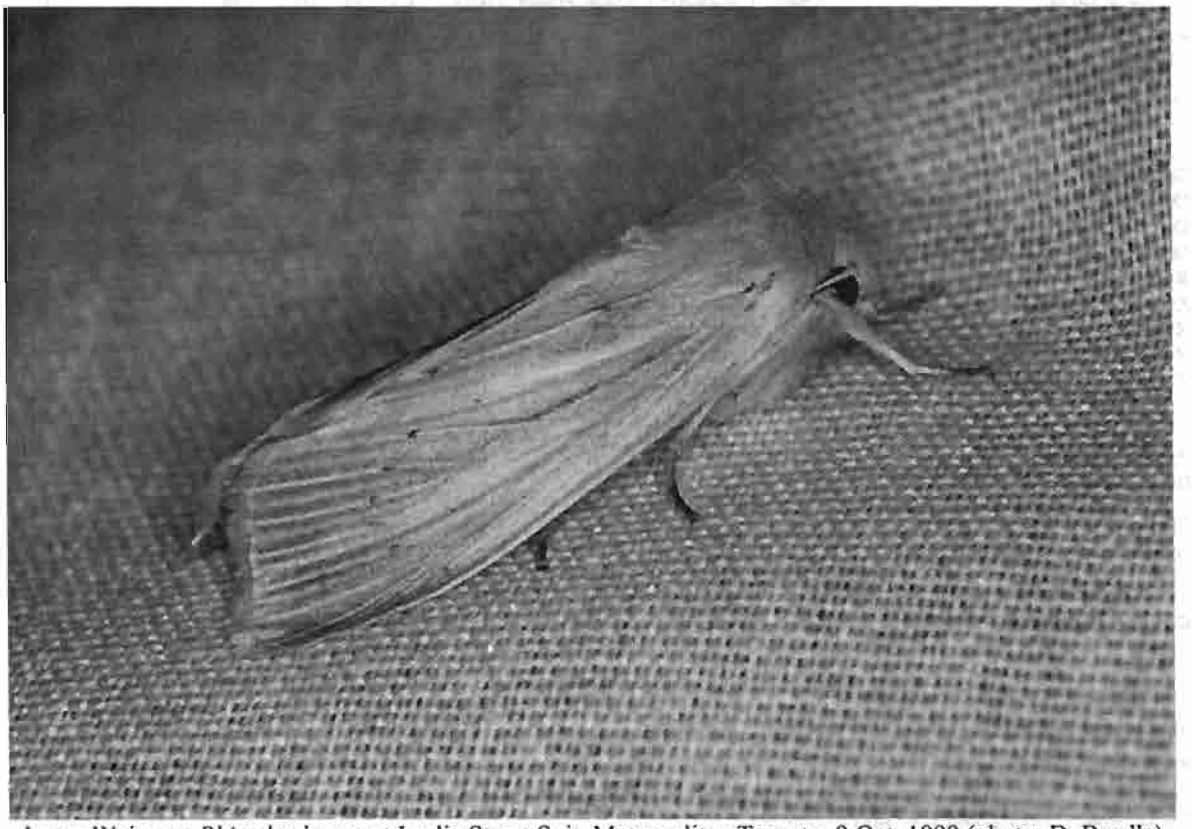


Catocala lineella at Dickey Lake, Hastings County, 27 July 2002 (photo: D. Beadle)

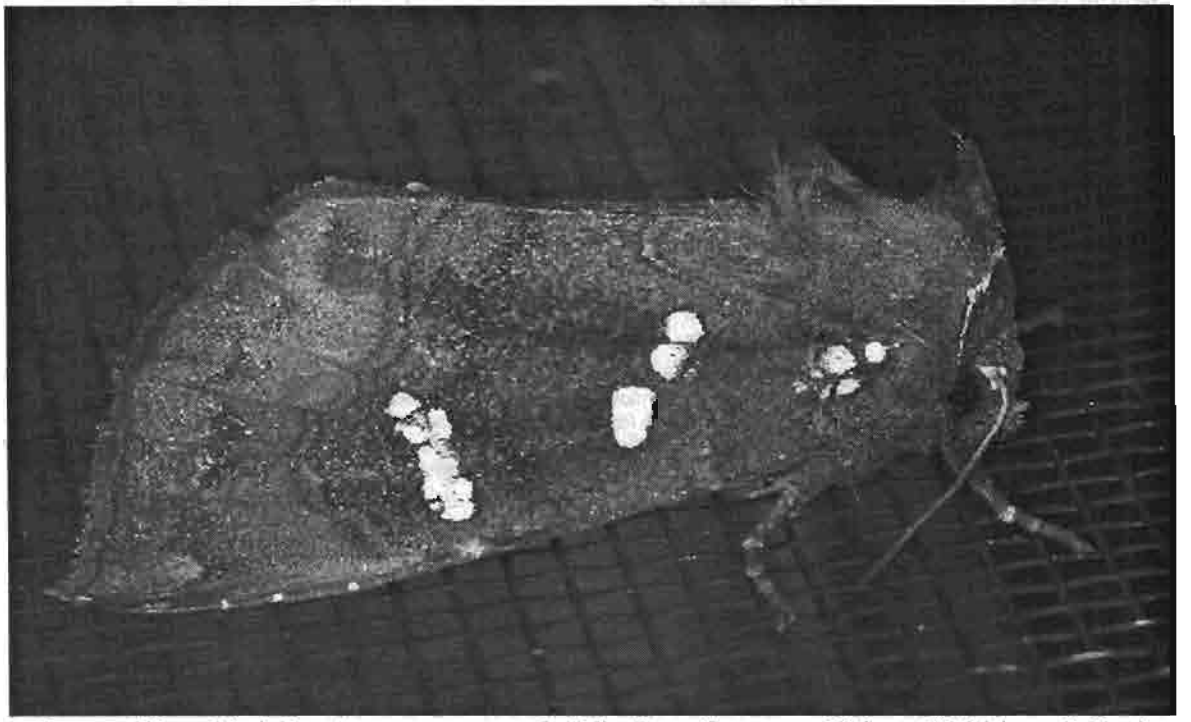


Iodopepla u-album at Long Point Provincial Park, Norfolk County, 14 May 2000 (photo: D. Beadle)

9393.1	**Rhizedra lutosa**	METR	Toronto, Leslie Street Spit	09	Oct	1999	DB	1	P	BL
9393.1	Rhizedra lutosa	DURH	Darlington Nuclear Power Station	01	Sep	2000	DB	1	P	MV
	Both are first county records. A recently introduced Palaearctic species; larvae feed on *Phragmites* . First recorded in Canada at Windsor in 1993, and also at Port Franks in 1997 and 1998.									
9413.1	**Oligia subjuncta**	LEED	Delta	30	Jun	2002	JPC	1	C	**MV/BL**
9413.1	Oligia subjuncta	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
9413.1	Oligia subjuncta	LEED	Delta	07	Jul	2002	JPC	1	C	MV/BL
9413.1	Oligia subjuncta	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
9413.1	Oligia subjuncta	DURH	Brooklin	20	Jul	2002	DB	1		MV
9418	**Oligia obtusa**	NORF	Wilson Tract	30	Jul	2002	DB, MK	1		MV
9418	Oligia obtusa	DURH	Brooklin	04	Aug	2002	DB	1		MV
9433	**Xylomoia chagnoni**	LEED	Delta	01	Jul	2002	JPC	1	C	MV/BL
9433	Xylomoia chagnoni	LEED	Delta	05	Jul	2002	JPC	2		MV/BL
9433	Xylomoia chagnoni	LEED	Delta	06	Jul	2002	JPC	2	C	MV/BL
9433	Xylomoia chagnoni	LEED	Delta	07	Jul	2002	JPC	2		MV/BL
9433	Xylomoia chagnoni	LEED	Delta	08	Jul	2002	JPC	6	C	MV/BL
9433	Xylomoia chagnoni	LEED	Delta	09	Jul	2002	JPC	2	C	MV/BL
9433	Xylomoia chagnoni	LEED	Delta	10	Jul	2002	JPC	1		MV/BL
9433	Xylomoia chagnoni	LEED	Delta	11	Jul	2002	JPC	2		MV/BL
9434	**Spartiniphaga includens**	LEED	Delta	08	Jul	2002	JPC	1	C	MV/BL
	First county record.									
9436	**Spartiniphaga panatela**	LEED	Delta	03	Jul	2002	JPC	1	C	MV/BL
	First county record.									
9443	**Chortodes defecta**	LEED	Delta	05	Jul	2002	JPC	1	C	MV/BL
	First county record.									
9505	**Papaipema cerussata**	ESSE	LaSalle, 7100 Matchette Road	28	Sep	1996	PDP	1	P	
	This species is fairly common at Ojibway Prairie in Windsor.									
9522	**Iodopepla u-album**	NORF	Long Point Prov. Pk.	14	May	2000	DB	1	P	BT
	First county record. Known previously in Ontario from Misery Bay, Manitoulin Island (specimen illustrated in Handfield 1999) and Port Franks (many occurrences from May to August).									
9548	**Conservula anodonta**	PETE	Petroglyphs Prov. Pk., maintenance building	09	Jul	2002	DBr	1	P	IL
9551	**Enargia mephisto**	NORF	Wilson Tract	26	Jun	2001	DB, MK, AT	2		MV
9551	Enargia mephisto	LEED	Delta	03	Jul	2002	JPC	1	C	MV/BL
9551	Enargia mephisto	HALT	Acton	09	Jul	2002	WDM, IM	1		
9551	Enargia mephisto	LEED	Delta	09	Jul	2002	JPC	1	C	MV/BL
9551	Enargia mephisto	LEED	Delta	12	Jul	2002	JPC	1	C	MV/BL
9656	**Platyperigea montana**	METR	Toronto	25	Jun	2002	JPC	1	C	IL/MV
9656	Platyperigea montana	METR	Toronto	30	Aug	2002	JPC	1	C	MV/BL
9656	Platyperigea montana	METR	Toronto	04	Sep	2002	DB	2	P	MV
9656	Platyperigea montana	METR	Toronto	13	Sep	2002	DB	1		MV
9656	Platyperigea montana	METR	Toronto	15	Sep	2002	JPC	1	C	MV/BL
9656	Platyperigea montana	METR	Toronto	16	Sep	2002	DB	1		MV
9656	Platyperigea montana	METR	Toronto	17	Sep	2002	JPC	1	C	MV/BL
9656	Platyperigea montana	METR	Toronto	18	Sep	2002	JPC	1	C	BT
	The June record is the first evidence of an earlier summer brood in Toronto in addition to the more common fall brood. This species has been recorded annually since 2000 at two locations in downtown Toronto and may well have been established previously, possibly as a result of accidental importation from western Canada or the Palaearctic. Otherwise known in eastern Canada only from a residential area in downtown Montreal; outside of Toronto previous reports of Civil Rustic *Platyperigea montana* in Ontario have all proved to be pale specimens of Speckled Rustic *Platyperigea multifera* (Don Lafontaine pers. comm.).									

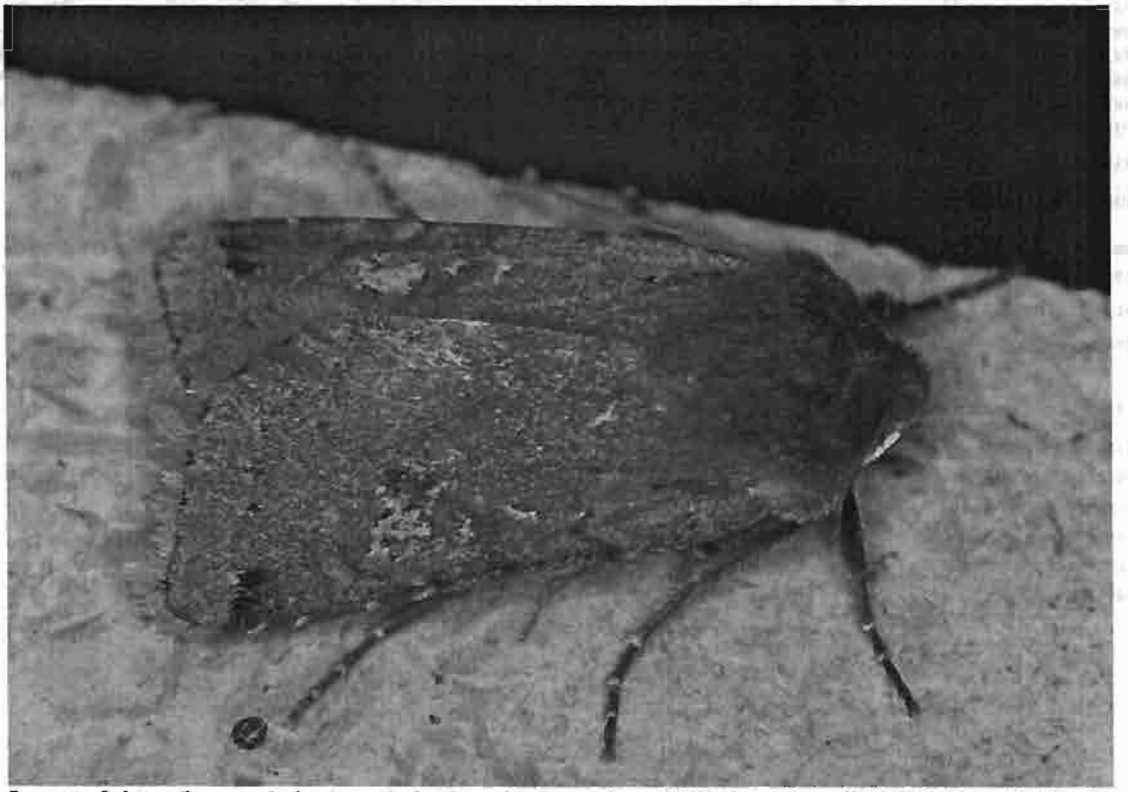


Large Wainscot *Rhizedra lutosa* at Leslie Street Spit, Metropolitan Toronto, 9 Oct. 1999 (photo: D. Beadle)



Ironweed Borer Moth *Papaipema cerussata* at LaSalle, Essex County, on 28 Sept. 1996 (photo: P. Pratt)

Oncocnemis saundersiana at Brooklin, Durham Region, 21 Sept. 2002 (photo: D. Beadle)



Cerastis fishii at Portage Lake (near Lake Joseph), Parry Sound District, 29 April 2000 (photo: D. Beadle)

9665	**Spodoptera exigua**	METR	Toronto	26	Sep	2002	JPC	1	C	FD
9665	Spodoptera exigua	METR	Toronto	15	Oct	2002	JPC	1	C	MV/BL
	FIRST ONTARIO RECORD - These are the first confirmed Ontario records of *Spodoptera exigua* (Don Lafontaine pers. comm.), a fall migrant from the south that very rarely reaches southern Canada. Reported previously from Ontario by Riotte (1992), possibly in error for *Spodoptera frugiperda* , a much more common species in Ontario that was not listed by Riotte. One individual taken at light and another kicked up during the day along a railway, both in downtown Toronto.									
9666	**Spodoptera frugiperda**	METR	Toronto	18	Aug	2002	JPC	1	C	MV/BL
9666	Spodoptera frugiperda	METR	Toronto	21	Aug	2002	JPC	1		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	30	Aug	2002	JPC	2		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	02	Sep	2002	JPC	1		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	08	Sep	2002	JPC	1		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	30	Sep	2002	JPC	1		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	02	Oct	2002	JPC	1		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	06	Oct	2002	JPC	2		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	12	Oct	2002	JPC	1		MV/BL
9666	Spodoptera frugiperda	METR	Toronto	20	Oct	2002	JPC	1		BT
	A fairly good year for this more common migrant *Spodoptera* species.									
9688	**Galgula partita**	METR	Toronto	10	Nov	2002	DB	1		MV
	Late.									
9928	**Lithophane thaxteri**	NIPI	Algonquin Prov. Pk., Peck Twp., Found Lake staff house	06	May	2002	JJD	1	C, P	IL
10014	**Psaphida rolandi**	OTTA	Dunrobin	15	Apr	2002	DLS	1	P	IL
10014	Psaphida rolandi	OTTA	Dunrobin	16	Apr	2002	DLS	1	P	IL
	First county record.									
10099	**Oncocnemis saundersiana**	DURH	Brooklin	21	Sep	2002	DB	1	P	MV
	First county record - very few Ontario records.									
10317	**Hadena capsularis**	NORF	Wilson Tract	14	Jul	2002	DB, MK	1	P	MV
10434	**Faronta rubripennis**	NORF	Wilson Tract	30	Jul	2002	DB, MK	1	P	MV
	The **SECOND ONTARIO RECORD** and the first for southern Ontario. Forbes (1954) reported this species from Hymers in northwestern Ontario and this was the basis for Covell's (1984) mention of Ontario in the range for *Faronta rubripennis* (Charlie Covell pers. comm.). There are no Canadian specimens in the Canadian National Collection but a specimen of *rubripennis* from Hymers was located in the United States National Museum (Don Lafontaine pers. comm.). Although the possibility of mislabeling was considered, this species is also known from northern Minnesota (Don Lafontaine pers. comm.) and Wisconsin (Ferge & Balogh 2000), lending support to the Hymers record. In New Jersey, the larvae have been found repeatedly by Dale Schweitzer on Switchgrass Panicum virgatum, where they feed at night on the seeds; however, unlike the grass which adapts to a variety of soil types, the moth appears to be very local, usually in sandy areas not far from the hostplant, and may be easily missed (Don Lafontaine pers. comm.). Light trapping and searching for larva on Switchgrass at night with a flashlight in the appropriate habitat may yield additional records and further confirmation of its occurrence in northwestern Ontario.									
10438	**Pseudaletia unipuncta**	METR	Toronto	30	Jul	2002	JPC	1		DY
	Flying to and nectaring on Wild Carrot *Daucus carota* flowers at 1515h EDT.									
10532	**Homorthodes furfurata**	LEED	Delta	05	Jul	2002	JPC	1	C	MV/BL
10997	**Cerastis fishii**	PARR	Portage Lake (near Lake Joseph)	29	Apr	2000	DB	1	P	MV
	First county record – very few Ontario records.									
11062	**Eutricopis nexilis**	NIPI	Algonquin Prov. Pk., Sproule Twp., Visitor Centre	22	May	2002	JJD	1	C	DY
	On flowers of Dandelion *Taraxacum officinalis* .									
11072	**Heliothis phloxiphaga**	METR	Toronto, Leslie Street Spit	22	Aug	1999	MK	2		DY
11072	Heliothis phloxiphaga	METR	Toronto, Leslie Street Spit	23	Aug	1999	DB	1	P	DY
11072	Heliothis phloxiphaga	METR	Toronto, Leslie Street Spit	23	Aug	1999	MK	2		DY
11072	Heliothis phloxiphaga	METR	Toronto, Leslie Street Spit	24	Aug	1999	MK	1		DY
11072	Heliothis phloxiphaga	METR	Toronto, Leslie Street Spit	27	Aug	1999	MK	1		DY
11135	**Schinia rivulosa**	NORF	Wilson Tract	30	Jul	2002	DB, MK	1		MV

References

Covell, C.V. Jr. 1984. A Field Guide to the Moths of Eastern North America. Houghton Mifflin Co., Boston.

Hodges, R.W., T. Dominick, D.R. Davis, D.C. Ferguson, J.G. Franclemont, E.G. Munroe, and J.A. Powell. 1983. Checklist of the Lepidoptera of America North of Mexico. E.W. Classey Ltd., London.

Ferge, L.A., and G.J. Balogh. 2000. Checklist of Wisconsin Moths (Superfamilies Drepanoidea, Geometroidea, Mimallonoidea, Bombycoidea, Sphingoidea and Noctuoidea). Milwaukee Public Museum Contributions in Biology and Geology No. 93.

Forbes, W.T.M. 1954. Lepidoptera of New York and Neighboring States, Part III, Noctuidae. Cornell University Agricultural Experiment Station Memoir No. 329.

Handfield, L. 1999. Le Guide des Papillons du Québec, version scientifique. Broquet, Boucherville.

Handfield, L. 2002. Additions, Corrections et Radiations à la Liste des Lépidoptères du Québec. Fabreries 27(1): 1-46.

Handfield, L., J.-F. Landry, B. Landry and J.D. Lafontaine.1997. Liste des Lépidoptères du Québec et du Labrador. Fabreries, Supplement 7: 1-155.

Riotte, J.C.E. 1992. Annotated List of Ontario Lepidoptera. Royal Ontario Museum Life Sciences Miscellaneous Publication.

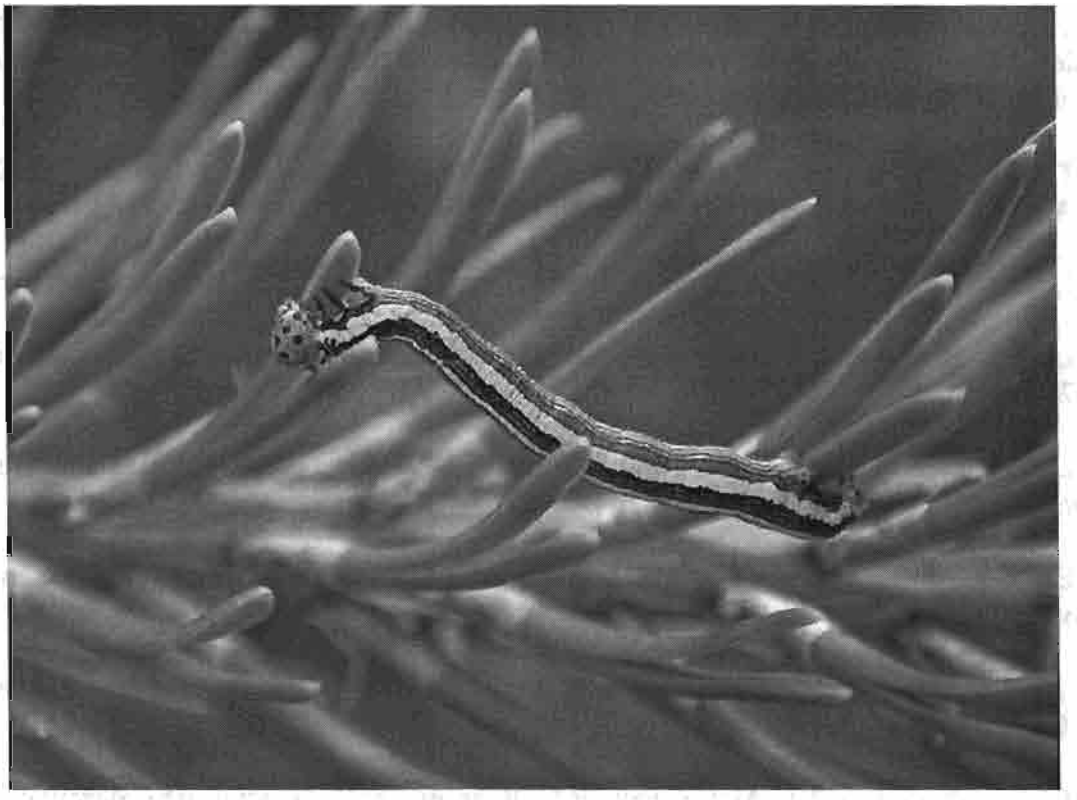
Skinner, B. 1984. Colour Identification Guide to Moths of the British Isles. Viking, Harmondsworth, Middlesex, U.K.

Wagner, D.L., D.C. Ferguson, T.L. McCabe and R.C. Reardon. 2001. Geometroid Caterpillars of Northeastern and Appalachian Forests. United States Department of Agriculture.

Civil Rustic *Platyperigea montana* at Toronto, Metropolitan Toronto, 4 Sept. 2002 (photo: D. Beadle)

CYCLICAL SUMMARY OF MOTHS IN ONTARIO: GEOMETRIDAE, URANIIDAE, AND DREPANIDAE (INCLUDING THYATIRINAE) 1998-2002

Compiled by Jeffrey P. Crolla



Nepytia pellucidaria larva on Jack Pine *Pinus banksianae* near Lake Traverse, Nipissing District, in Algonquin Provincial Park, 14 July 2001 (photo: J. Dombroskie)

Introduction

This year's Cyclical Summary is included as a table in a PDF file found on the CD accompanying this issue of *Ontario Lepidoptera*. It comprises all reports received of moths in the families Geometridae, Uraniidae and Drepanidae from 1998 to 2002, as well as some previously unpublished reports from earlier years, and includes over 4,300 records of 237 species (227 Geometridae, 2 Uraniidae, and 8 Drepanidae). Records are sorted by species, then by county (alphabetically), and then by date. Species are listed in taxonomic order following Hodges *et al.* (1983), except that Drepanidae is placed following Uraniidae, and Thyatiridae is included as a subfamily (Thyatirinae) of Drepanidae, reflecting recent changes in classification. Nomenclature has been updated, largely following Handfield *et al.* (1997) and Handfield (2002).

Data has been carefully checked by the compiler and every effort has been made to verify records and examine vouchers for new or provincially rare and unusual species, as well as questionable or out-of-season records. However, the majority of records are unverified reports and occasional identification errors may remain, particularly for similar species in difficult genera such as *Macaria*, *Eupithecia*, *Eufidonia*, *Hydriomena*, and *Scopula*. Any corrections brought to the compiler's attention will be published in future issues of *Ontario Lepidoptera*.

The PDF file (Portable Document Format) on the CD can be opened using Adobe Acrobat Reader, which comes pre-installed on most computers, and is also available as a free download at http://www.adobe.com/support/downloads/main.html. The table can be searched in a limited way using the *Find* function in Acrobat Reader. Additional PDF files including keys to observer's initials, county codes, and other abbreviations used in the summary are also included on the CD. For TEA members without access to a computer or printer, a print-out of the Cyclical Summary can be requested from Colin Jones (co-editor, *Ontario Lepidoptera*).

For each record, the Cyclical Summary includes data on county, locality, date, observers, numbers seen, whether voucher specimens or photographs exist to support the record, and the collecting method employed. Due to space limitations, where hostplant data is available for larval records this has been included in the locality field following the locality. Other valuable data that could not be included in the Cyclical Summary, such as georeferencing (UTM or Lat/Long) information, is retained in the TEA's Ontario Moth Records Database, and further inquiries or requests for information can be directed to the compiler.

Highlights

Notable records during the five year period include the rediscovery of ***Nepytia pellucidaria*** in Renfrew County in 2000, with subsequent records from Algonquin Park in 2001 and 2002 (an additional possible specimen from Renfrew County in 1998 is being confirmed). This rare northern *Nepytia* was recently suggested to be possibly extinct (but see p. 74) and is known historically from only a handful of locations in Ontario. The first records for Canada of **Many-lined Angle *Macaria multilineata*** were collected in Leeds County in 2002 (see article on p. 56). A single **Pale-veined Enconista *Isturgia dislocaria***, which is poorly known in Ontario outside Point Pelee and Pelee Island, was taken at Port Franks in 1998 (a previous record not listed here is of a specimen collected on 20 July 1994 in Brantford by W.G. Lamond). An outbreak of **Fall Cankerworm *Alsophila pometaria*** was noted just prior to the period in November and December of 1996 with thousands reported by observers in Metropolitan Toronto and near Campbellville, Halton County. Records for a good number of rare or infrequently reported species include **Currant Spanworm *Macaria ribearia***, **Hollow-spotted Angle *Macaria gnophosaria***, **Dotted Gray *Glena cribrataria***, **Pale Viburnum Geometer *Orthofidonia exornata***, **Double-lined Gray *Cleora sublunaria***, **Projecta Gray *Cleora projecta***, ***Tacparia atropunctata***, **Packard's Wave *Cyclophora packardi***, ***Plemyria georgii***, ***Thera contractata***, ***Xanthorhoe iduata***, ***Hydrelia lucata***, ***Epirrita autumnata***, **Treble-bar *Aplocera plagiata***, and **Three-patched Bigwing *Heterophleps refusaria*** amongst others.

Few Geometrids (and no Drepanids or Uraniids) are migrants to Ontario, but three annual migrants from the south, **Common Tan Wave *Pleuroprucha insulsaria***, **The Gem *Orthonama obstipata*** and **Curve-**

lined Angle *Costaconvexa centrostrigaria* were well represented, with good numbers in southern Ontario (ie. Toronto), and with ***O. obstipata*** and ***C. centrostrigaria*** being recorded as far north as Matachewan in 1998.

References

Hodges, R.W., T. Dominick, D.R. Davis, D.C. Ferguson, J.G. Franclemont, E.G. Munroe, and J.A. Powell. 1983. Checklist of the Lepidoptera of America North of Mexico. E.W. Classey Ltd., London.

Handfield, L. 2002. Additions, Corrections et Radiations à la Liste des Lépidoptères du Québec. Fabreries 27(1): 1-46.

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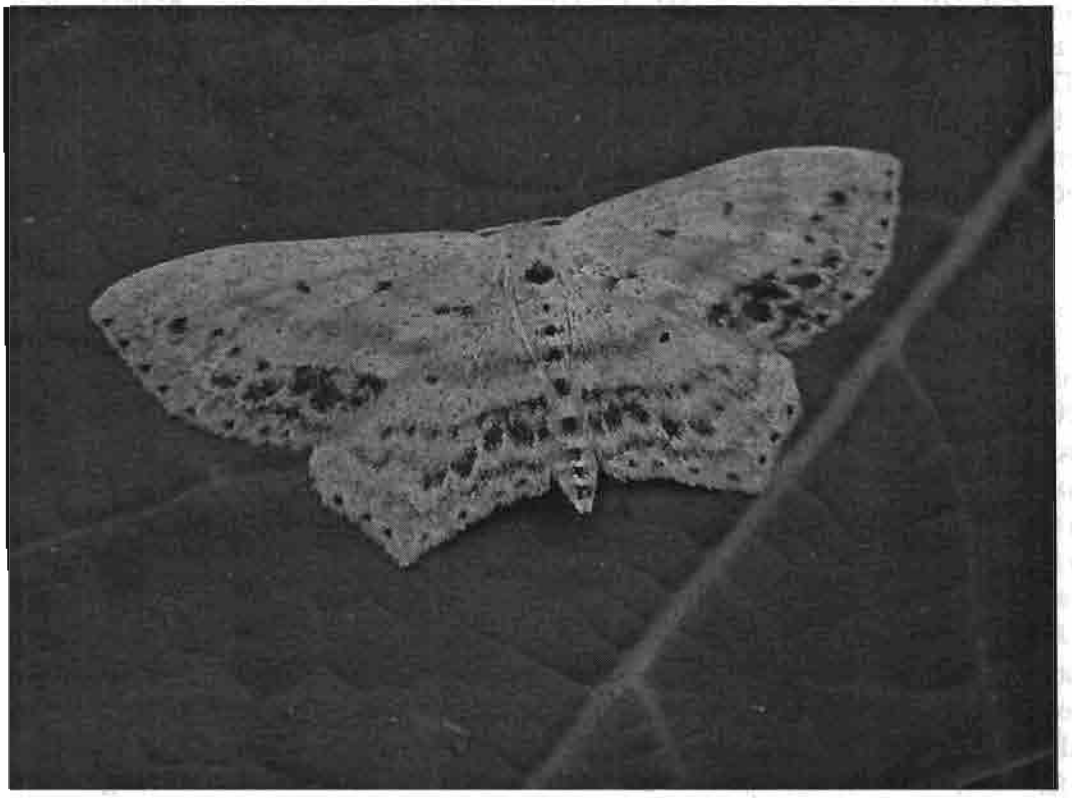

Frosted Tan Wave *Scopula cacuminaria* at Found Lake, Nipissing District, in Algonquin Provincial Park, 29 July 2000 (photo: J. Dombroskie)

PUBLICATIONS AVAILABLE FROM THE TEA

Books: reproductions of out-of-print books

The Odonata of Canada & Alaska (3 volumes) by E.M. Walker
$196 Can ($190 for TEA members who pick it up); In USA: $145 US surface; $150 US airmail

The Cicindelidae of Canada (tiger beetles) by J.B. Wallis (1961) with colour plates
$28 Can ($23 for TEA members who pick it up); In USA: $23 US surface: $26 US airmail

The North American Dragonflies of the Genus Aeshna by E.M. Walker (1921) with colour plates
$65 Can ($60 for TEA members who pick it up); In USA: $50 US surface; $53 US airmail

The North American Dragonflies of the Genus Somatochlora by E.M.Walker (1925)
$55 Can ($50 for TEA members who pick it up); In USA: $43 US surface: $46 US airmail

Books: Other publishers

Damselflies and Dragonflies (Odonata) of Ontario: Resource Guide and Annotated List
By P.M. Catling and V.R. Brownell 2000. Annotated list of 168 species of odonata in Ontario including conservation status, flight period, habitat, distribution and identification. $34 Can; In USA: $25 US.

Books: T.E.A. publications

The Ontario Butterfly Atlas by A.M. Holmes, R.R. Tasker, Q.F.Hess, A.J.Hanks (1991)
ISBN: 0921631111 $25 Can ($20 for TEA members who pick it up); In USA: $20 US

Ontario Insects – T.E.A. Newsjournal ISSN: 1203-3995
Back Issues: $5 Can each; In USA: $5 US; Subscription: $25 Can; In USA: $25 US

Annual Ontario Lepidoptera Summaries (for 1987, '88, '93, '95 to 2001)
$10 each; In USA: $10 US surface; $15 US airmail; (free with T.E.A. membership)

Ontario Odonata (annual)
Volume 1 (1999) ISBN: 0921631219 June 2000 153 pages
This publication includes 1999 Odonata observations and 16 articles on the Odonata of Ontario. The articles cover topics such as conservation status ranks, natural history, migration, lists and records, and an illustrated key to the mature nymphs and exuviae of eastern Canadian *Stylurus*. Cost: $25 Can.; In USA/overseas: $20 US.

Volume 2 (2000) ISBN: 0-921631-22-7 May 2001 200 pages
Volume 2 includes 16 articles and observations for 2000 as well as news, reviews and recent literature. The articles discuss significant range extensions ecology, regional lists, conservation and information on a museum collection. The database summary includes names, counties, locations, dates, and numbers for over 5000 reports. Cost: $25 Can; In USA/overseas: $20 US.

Volume 3 (2001) ISBN: 0921631243 May 2002 208 pages
Volume 3 includes 18 articles and observations of Ontario Odonata for the year 2001. The database summary includes names, counties, locations, dates, and numbers for 4122 reports for 2001 and reports for 1996 to 1998. Cost: $25 Can; In USA/overseas, $25 U.S.

Checklist of the Butterflies of the Toronto Region: 135 years of history (Second edition)
Includes flight seasons. Compiled by Barry Harrison. $2.50 Can ($2 for TEA members who pick it up); In USA: $3 US

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