



Fundy Model Forest

~Partners in Sustainability~

Report Title: Checklist of the Macromoths of Fundy National Park and the Greater Fundy Ecosystem, New Brunswick.

Author: A.Thomas

Year of project: 1998

Principal contact information: Natural Resources Canada
P.O. Box 4000, Fredericton N.B Canada
E3B 5P7

File Name:

Biodiversity_1998_Thomas_Checklist_of_the_Macromoths_of_Fundy_National_Park_and_the_Greater_Fundy_Ecosystem_New_Brunswick

**The Fundy Model Forest...
...Partners in Sustainability**

"The Fundy Model Forest (FMF) is a partnership of 38 organizations that are promoting sustainable forest management practices in the Acadian Forest region."

Atlantic Society of Fish and Wildlife Biologists
Canadian Institute of Forestry
Canadian Forest Service
City of Moncton
Conservation Council of New Brunswick
Fisheries and Oceans Canada
Indian and Northern Affairs Canada
Eel Ground First Nation
Elgin Eco Association
Elmhurst Outdoors
Environment Canada
Fawcett Lumber Company
Fundy Environmental Action Group
Fundy National Park
Greater Fundy Ecosystem Research Group
INFOR, Inc.
J.D. Irving, Limited
KC Irving Chair for Sustainable Development
Maritime College of Forest Technology
NB Department of the Environment and Local Government
NB Department of Natural Resources
NB Federation of Naturalists
New Brunswick Federation of Woodlot Owners
NB Premier's Round Table on the Environment & Economy
New Brunswick School District 2
New Brunswick School District 6
Nova Forest Alliance
Petitcodiac Sportsman's Club
Red Bank First Nation
Remsoft Inc.
Southern New Brunswick Wood Cooperative Limited
Sussex and District Chamber of Commerce
Sussex Fish and Game Association
Town of Sussex
Université de Moncton
University of NB, Fredericton - Faculty of Forestry
University of NB - Saint John Campus
Village of Petitcodiac
Washademoak Environmentalists



**Checklist of the Macromoths of Fundy
National Park and the Greater
Fundy Ecosystem, New Brunswick**



Fundy Model Forest
181 Aiton Road
Sussex East, NB E4G 2V5
Ph: (506) 432-2806
Fx: (506) 432-2807
Email: fundyfor@nbnet.nb.ca

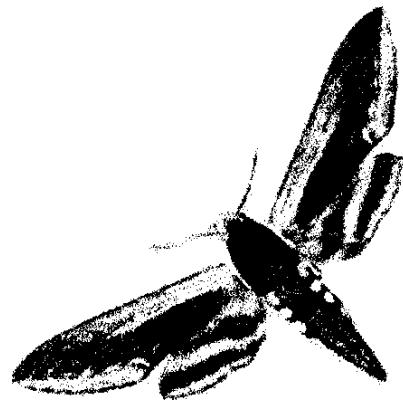
**CHECK LIST OF THE MACROMOTHS
OF FUNDY NATIONAL PARK AND
THE GREATER FUNDY ECOSYSTEM,
NEW BRUNSWICK**

by

A. W. Thomas
Research Scientist

Biodiversity Network, Canadian Forest Service-Atlantic Forestry Centre,
Natural Resources Canada, P.O. Box 4000, Fredericton,
New Brunswick, Canada E3B 5P7

January 1998



Unpublished report of Study# BI-2207 to Fundy National Park, Dept. of Canadian Heritage,
Alma, New Brunswick, in partial fulfillment of the "Status of Moths of Fundy National Park and
its Greater Ecosystem."

CHECK LIST OF THE MACROMOTHS OF FUNDY NATIONAL PARK AND THE GREATER FUNDY ECOSYSTEM, NEW BRUNSWICK

Introduction

Apart from short lists of New Brunswick moths published late in the last century and earlier this century (Mackenzie 1899; McIntosh 1899, 1901, 1904; Gorham 1945) there are few other lists of New Brunswick moths. Wood (1951) included 31 species of macromoths in his list of lepidoptera larvae collected in commercial blueberry fields in Charlotte Co., and Thomas (1996) listed 311 species, in 15 families of mostly macromoths, taken between 21 June-30 July, 1990 in Sunbury Co. Species whose larvae feed on forest trees were documented by McGugan (1958) and Prentice (1962, 1963). These three publications list all the species recorded by the Forest Insect Survey and include statements on their distribution across Canada. As such, it is not easy to obtain a list of species recorded from New Brunswick. The Forest Insect and Disease Survey published a list of insect pest species in the Maritime Provinces (Titus et al 1985). This is an alphabetical listing of species in all orders and, as such, it is extremely difficult to get a listing of the Lepidoptera. Also, the provinces where each species occurs is not recorded. Recently, the moth fauna of Fundy National Park has become well known. Edsall and Clay (1994) listed all the species collected during a full-year sample (1993) at two sites there, in Albert Co. and Kings Co.; a total of 311 species. Thomas et al. (1996) gave the flight seasons of 401 species of moths taken at the Wolfe Lake site in Fundy National Park in 1994. At the end of 1996, the species richness at the Wolfe Lake site was up to 522 (Thomas and Clay 1997a, 1997b). Up until now, this Wolfe Lake data set represented the most complete listing of moth species for any single locality in the Maritime Provinces. Perhaps the best estimate of all the species expected to be present in New Brunswick can be obtained from Ferguson's (1954) publication on the Lepidoptera of Nova Scotia, where he documented the occurrence of 789 species in that province.

Data

This manuscript lists all the species of macromoths, in 15 selected families, collected during a 4-year period, 1994-1997, in Fundy National Park and adjacent forests that form part of the Greater Fundy Ecosystem. Collections from 29 light traps over the 4-year period produced about 180,000 individuals of which over 130,000 have been identified. Thus far, 602 species in the 15 selected families have been identified (Table 1) which together with 17 other species listed by Edsall and Clay (1994) (also included in Table 1 and identified by **) that were not collected during the study period, bring the species total to 619. These species are listed in the check list in a sequence that follows Hodges' (1983) Check List and uses the same catalogue numbers. Since 1983, there have been some changes in nomenclature. These are scattered throughout the literature but many are in Poole (1996). I have incorporated all the changes that I am aware of. Also included in the check list are the extreme dates of captured, summarized for all collection sites and all years, to give an idea of the seasonal flight activity for each species. A coloured photograph of at least one species from each Family or Subfamily is featured in Plates I, II, and III. The illustrated species are bolded in the check list.

Acknowledgements

I am deeply indebted to Dr. Doug Clay, Fundy National Park, who made this study possible and supported it in many ways including financial and logistical. Ed Kettela, CFS-Atlantic, provided logistic and financial support, via the Fundy Model Forest program, for which I am grateful. I thank Shirley Butland, Fundy National Park, and Heather Clay for field assistance in the emptying of traps and initial sorting of specimens.

Literature Cited

- Edsall, J. and D. Clay. 1994. Preliminary survey of lepidoptera in Fundy National Park (including a checklist of species recorded in 1993). Unpublished manuscript of Parks Canada, Alma, N.B., Res. Notes of Fundy Nat. Park No. FUN/94-06. 12 pp.
- Ferguson, D. C. 1954. The Lepidoptera of Nova Scotia. Proc. N.S. Instit. Sci. 23(3): 161-375 plus corrigenda, addenda, map.
- Gorham, R.P. 1945. Lepidoptera (moths) taken in and near Fredericton, N.B. Acadian Naturalist 2: 52-66.
- Hodges, R.W., et al. 1983. Check List of the Lepidoptera of America north of Mexico. E.W. Classey Ltd. and The Wedge Entomological Research Foundation. London. 284 pp.
- Mackenzie, J.D.B.F. 1899. A preliminary list of the moths of Miramichi with notes thereon. Proc. Miramichi Natural History Assoc. 1: 37-39; with a continuation in 2: 34-35.
- McGugan, B.M. 1958. Forest Lepidoptera of Canada recorded by the Forest Insect Survey. Vol 1-Papilionidae to Arctiidae. Forest Biology Division, Canada Dept. Agriculture. Publ. 1034. pp. 1-76.
- McIntosh, W. 1899. The Noctuidae of New Brunswick. Introductory list. Bull. Nat. Hist. Soc. N.B. No. XVIII., Vol. IV., Article III. 209-222.
- McIntosh, W. 1901. The hawk and bombycine moths of New Brunswick.- Introductory list. Bull. Nat. Hist. Soc. N.B. No. XIX., Vol. IV., Part IV, Article III. 301-302.
- McIntosh, W. 1904. Supplementary list of the Lepidoptera of New Brunswick. Bull. Nat. Hist. Soc. N.B. No. XXIII., Vol. V., Article IV. 355-357.
- Poole, R.W. 1996. *Nomina Insecta Nearctica*. A checklist of the insects of North America. Volume 3: Diptera, Lepidoptera, Siphonaptera. Entomological Information Services, Rockville, Maryland. 1143 pp.

- Prentice, R. M. 1962. Forest Lepidoptera of Canada recorded by the Forest Insect Survey. Vol 2. Nycteolidae, Notodontidae, Noctuidae, Liparidae. Forest Entomology and Pathology Branch, Canada Department of Forestry. Bulletin 128. pp. 77- 281.
- Prentice, R. M. 1963. Forest Lepidoptera of Canada recorded by the Forest Insect Survey. Vol 3. Lasiocampidae, Drepanidae, Thyatiridae, Geometridae. Forest Entomology and Pathology Branch, Canada Department of Forestry. Publ. 1013. pp. 282-542.
- Thomas, A.W. 1996. Light-trap catches of moths within and above the canopy of a northeastern forest. *J. Lepid. Soc.* **50**: 21-45.
- Thomas, A.W., D. Clay and E.G. Kettela. 1996. Moth diversity in an old-growth forest - summary of the Wolfe Lake site, Fundy National Park, 1994. Unpublished report, Canadian Forest Service-Atlantic Forestry Centre, Fredericton, New Brunswick. 57 pp.
- Thomas, A.W. and D. Clay. 1997a. Moth species diversity in Fundy National Park. I. 1996 white-light trap catches. Unpublished report, Canadian Forest Service-Atlantic Forestry Centre, Fredericton, New Brunswick. 15 pp.
- Thomas, A.W. and D. Clay. 1997b. Moth species diversity in Fundy National Park. II. 1994-1996 black-light trap catches at Wolfe Lake. Unpublished report, Canadian Forest Service-Atlantic Forestry Centre, Fredericton, New Brunswick. 20 pp.
- Titus, F.A., O.A. Meikle and K.J. Harrison. 1985. Scientific and common names of insects and mites of interest in the Maritime Provinces. Maritimes Forest Research Centre, Information Report M-X-155. 130 pp.
- Wood, G.W. 1951. An annotated list of lepidopterous larvae from commercial blueberry fields, Charlotte County, N.B. *Canad. Entomol.* **83**: 241-244.

Table 1. Distribution of moth species, within Families:Subfamilies, collected in Fundy National Park and the Greater Fundy Ecosystem 1993-1997.

Family:	Subfamily	Number of species
Hepialidae		4
Sesiidae:	Sesiinae	1
Cossidae:	Cossinae	1
Limacodidae		4
Thyatiridae:	Thyatirinae	3
Drepanidae:	Drepaninae	3
Geometridae:	Archierinae	1
Geometridae:	Oenochrominae	1
:	Ennominae	87
:	Geometrinae	3
:	Sterrhinae	6
:	Larentiinae	82
Epiplemidae		1
Lasiocampidae:	Macromphaliinae	1
:	Gastropachinae	1
:	Lasiocampinae	2
Saturniidae:	Citheroniinae	1
:	Saturniinae	4
Sphingidae:	Sphinginae	12
:	Macroglossinae	3
Notodontidae		30
Arctiidae:	Lithosiinae	3
:	Arctiinae	22
:	Ctenuchinae	2
Lymantriidae:	Orgyiinae	4
Noctuidae:	Herminiiinae	18
:	Rivulinae	1
:	Hypeninae	6
:	Catocalinae	20
:	Plusiinae	23
:	Sarrothripinae	2
:	Acontiinae	10
:	Pantheinae	5
:	Acronictinae	23
:	Agaristinae	1
:	Amphipyrinae	70
:	Cuculliinae	46
:	Hadeninae	54
:	Noctuinae	55
:	Heliothinae	3

**CHECK LIST OF MOTHS OF FUNDY NATIONAL PARK AND THE GREATER
FUNDY ECOSYSTEM WITH FIRST AND LAST DATES OF CAPTURE.**

(Species in **bold** illustrated in plates. **Species seen by Edsall & Clay (1994); not seen in 1994, 1995, 1996, 1997)

Family: Subfamily

Check List #	Species	Extreme dates of capture
HEPIALIDAE (ghost moths)		
18	<i>Sthenopsis argenteomaculatus</i> (Harr.)	2-25/07
20	<i>Sthenopsis quadriguttatus</i> (Grt.)	27/07
22	<i>Sthenopsis auratus</i> Grt.	04/07-01/08
31	<i>Korscheltellus gracilis</i> (Grt.)	02/07-22/08
SESIIDAE (clearwing moths)		
: SESIINAE		
2554	<i>Synanthedon acerni</i> (Clem.)	27/06-09/08
COSSIDAE (carpenterworm moths)		
: COSSINAE		
2693	<i>Prionoxystus robiniae</i> (Peck)	
LIMACODIDAE (slug caterpillar moths)		
4652	<i>Tortricidia testacea</i> Pack.	16/06-06/09
4654	<i>Tortricidia flexuosa</i> (Grt.)	03-15/08
4659	<i>Packardia geminata</i> (Pack.)	19/06-06/07
4661	<i>Packardia elegans</i> (Pack.)	26/06-07/07
THYATIRIDAE (thyatirid moths)		
: THYATIRINAE		
6235	<i>Habrosyne scripta</i> (Gosse)	01/06-06/09
6237	<i>Pseudothyatira cymatophoroides</i> (Gn.)	11/06-15/08
6240	<i>Euthyatira pudens</i> (Gn.)	22/05
DREPANIDAE (hooktip moths)		
: DREPANIINAE		
6251	<i>Drepana arcuata</i> Wlk.	01/06-09/09
6252	<i>Drepana bilineata</i> (Pack.)	21/05-31/08
6253	<i>Eudeilinia herminiata</i> (Gn.)	03/06-26/07
GEOMETRIDAE (loopers)		
: ARCHIERINAE		
6256	<i>Archiearis infans</i> (Mosch.)	16/04-03/05
: OENOCHROMINAE		
6258	<i>Alsophila pometaria</i> (Harr.)	23/10-18/11
: ENNOMINAE		
6270	<i>Protimate virginalis</i> (Hulst)	08-23/07
6273	<i>Itame pustularia</i> (Gn.)	16/07-28/09
6286	<i>Itame brunneata</i> (Thunb.)	20/07
6287	<i>Itame anataria</i> (Swett)	26/06-17/08
6303	<i>Itame subcessaria</i> (Wlk.)	28/07-09/08
6304	<i>Itame bitactata</i> (Wlk.)	17/07-25/08
6326	<i>Semiothisa aemulataria</i> (Wlk.)	11/06-31/07
6330	<i>Semiothisa ulsterata</i> (Pears.)	05/06-09/09
6342	<i>Semiothisa bisignata</i> (Wlk.)	24/07-01/08
6342.1	<i>Semiothisa</i> n.sp. nr. <i>bisignata</i>	05/07-06/08
6343	<i>Semiothisa sexmaculata</i> (Pack.)	13/06-22/08
6344	<i>Semiothisa signaria dispuncta</i> (Wlk.)	20/05-02/10

6347	<i>Semiothisa pinistrobata</i> Fgn.	05/07/07
6349	<i>Semiothisa banksianae</i> Fgn.	15/06-07/08
6350	<i>Semiothisa submarmorata</i> (Wlk.)	12/06-16/08
6351	<i>Semiothisa oweni</i> (Swett)	07/07
6396	<i>Semiothisa neptaria</i> (Gn.)	01/08
6428	<i>Orthofidonia tinctaria</i> (Wlk.)	04/06-10/07
6429	<i>Orthofidonia exornata</i> (Wlk.)	04-29/06
6430	<i>Orthofidonia flavivenata</i> (Hulst)	20/05-23/06
6570	<i>Aethalura intertexta</i> (Wlk.)	11/05-27/07
6582	<i>Anacamptodes vellivolata</i> (Hulst)	12-21/06
6583	<i>Anacamptodes ephyraria</i> (Wlk.)	14/08-09/09
6588	<i>Iridopsis larvaria</i> (Gn.)	11/06-11/09
6590	<i>Anavitrinella pampinaria</i> (Gn.)	13/06-19/07
6597	<i>Ectropis crepuscularia</i> (D. & S.)	15/05-15/07
6598	<i>Protoboarmia porcelaria</i> (Gn.)	29/06-22/08
6620	<i>Melanolophia canadaria</i> (Gn.)	01/06-10/07
6621	<i>Melanolophia signataria</i> (Wlk.)	20/05-03/07
6637	<i>Eufidonia convergaria</i> (Wlk.)	18-27/06
6639	<i>Eufidonia discospilata</i> (Wlk.)	07-29/06
6640	<i>Biston betularia cognataria</i> (Gn.)	01/06-26/08
6651	<i>Lycia ursaria</i> (Wlk.)	16-22/05
6654	<i>Hypagyrtis unipunctata</i> (Haw.)	12/06-15/08
6656	<i>Hypagyrtis piniata</i> (Pack.)	02/07-17/08
6658	<i>Phigalia titea</i> (Cram.)	08-22/05
6666	<i>Lomographa semiclarata</i> (Wlk.)	04-22/06
6667	<i>Lomographa vestaliata</i> (Gn.)	04/06-25/07
6668	<i>Lomographa glomeraria</i> (Grt.)	05/05-24/06
6677	<i>Cabera erythemaria</i> Gn.	05/06-15/08
6678	<i>Cabera variolaria</i> Gn.	18/06-22/07
6725	<i>Euchlaena muzaria</i> (Wlk.)	28/06-07/08
6731	<i>Euchlaena madusaria</i> (Wlk.)	17/07
6734	<i>Euchlaena marginaria</i> (Minot)	11-19/06
6737	<i>Euchlaena tigrinaria</i> (Gn.)	22/05-10/06
6740	<i>Xanthotype urticaria</i> Swett	25/06-26/07
6743	<i>Xanthotype sospeta</i> (Drury)	19/06-05/08
6753	<i>Pero honestaria</i> (Wlk.)	03/07
6755	<i>Pero morrisonaria</i> (Hy. Edw.)	07/06-23/07
6763	<i>Nacophora quernaria</i> (J. E. Smith)	07/06-10/08
6796	<i>Campaea perlata</i> (Gn.)	25/06-14/08
6797	<i>Ennomos magnaria</i> Gn.	15/08-03/10
6798	<i>Ennomos subsignaria</i> (Hbn.)	29/06-18/09
6799	<i>Epirranthis substriataria</i> (Hulst)	15-29/05
6804	<i>Petrophora subaequaria</i> (Wlk.)	15/05-30/06
6806	<i>Tacparia atropunctata</i> (Pack.)	09/06
6807	<i>Tacparia detersata</i> (Gn.)	01/06-03/07
6811	<i>Homochlodes lactispargaria</i> (Wlk.)	31/05-24/06
6812	<i>Homochlodes fritillaria</i> (Gn.)	01/06-22/07
6815	<i>Guenaria similaria</i> (Wlk.)	07/06-06/07
6817	<i>Selenia alciphearia</i> Wlk.	22/05-27/06
6818	<i>Selenia kentaria</i> Wlk.	31/05-05/07
6819	<i>Metanema inatomaria</i> Gn.	17/06-23/08
6820	<i>Metanema determinata</i> Wlk.	14/06-31/07
6822	<i>Metarranthis duaria</i> (Gn.)	01/06-04/07

6826	<i>Metarranthis hypocharia</i> (H.-S.)	07/06-04/07
6836	<i>Anagoga occiduaria</i> (Wlk.)	05/06-19/07
**6837	<i>Probole alienaria</i> H.-S.	
6838	<i>Probole amicaria</i> (H.-S.)	31/05-03/08
6840	<i>Plagodis serinaria</i> H.-S.	01/06-11/07
6842	<i>Plagodis phlogosaria</i> (Gn.)	21/05-19/07
6844	<i>Plagodis alcoolaria</i> (Gn.)	01/06-29/07
6863	<i>Caripeta divisata</i> Wlk.	04/06-04/09
6864	<i>Caripeta piniata</i> (Pack.)	13/29/06
6867	<i>Caripeta angustiorata</i> Wlk.	14/07-13/08
**6884	<i>Besma endropiaria</i> (G. & R.)	
6885	<i>Besma quercivoraria</i> (Gn.)	07/06-25/07
6888	<i>Lambdina fiscellaria</i> (Gn.)	15/08-24/10
6898	<i>Cingilia catenaria</i> (Drury)	16-27/09
6906	<i>Nepytia canosaria</i> (Wlk.)	29/09
6912	<i>Sicya macularia</i> (Harr.)	20/06-29/08
6963	<i>Tetracis crocallata</i> Gn.	05/06-17/07
6964	<i>Tetracis cachexiata</i> Gn.	05/06-16/07
6965	<i>Eugonobapta nivosaria</i> (Gn.)	20/07-03/08
6966	<i>Eutrapela clemataria</i> (J. E. Smith)	21/05-12/07
6982	<i>Prochoerodes transversata</i> (Drury)	31/07-28/09
7009	<i>Nematoxampa resistaria</i> (H.-S.)	20/07-29/08
: GEOMETRINAE		
7048	<i>Nemoria mimosaria</i> (Gn.)	05/06-26/07
7058	<i>Synchlora aerata</i> (F.)	23-26/07
7085	<i>Mesothea incertata</i> (Wlk.)	26/06
: STERRHINAE		
7126	<i>Idaea dimidiata</i> (Hufn.)	10/07-01/09
7132	<i>Pleuroprucha insulsaria</i> (Gn.)	12/07
7139	<i>Cyclophora pendulinaria</i> (Gn.)	06/06-05/09
7159	<i>Scopula limboundata</i> (Haw.)	06/07-13/08
7164	<i>Scopula junctaria</i> (Wlk.)	13/07-01/08
7169	<i>Scopula inductata</i> (Gn.)	14-28/07
: LARENTIINAE		
7182	<i>Dysstroma citrata</i> (L.)	20/07-09/10
7187	<i>Dysstroma truncata traversata</i> (Kellicott)	04/07-14/08
7188	<i>Dysstroma walkerata</i> (Pears.)	23/06-20/07
7189	<i>Dysstroma hersiliata</i> (Gn.)	05/07-19/08
7191	<i>Dysstroma formosa</i> (Hulst)	24/07
7194	<i>Dysstroma brunneata</i> (Pack.)	06-13/07
7199	<i>Eulithis propulsata</i> (Wlk.)	06-24/08
7201	<i>Eulithis testata</i> (L.)	23/08-11/09
7205	<i>Eulithis flavibrunneata</i> (McD.)	01-14/08
7206	<i>Eulithis explanata</i> (Wlk.)	18/07-12/09
7208	<i>Eulithis serrataria</i> (B. & McD.)	02-24/08
7213	<i>Ecliptopera silacea albolineata</i> (Pack.)	30/05-01/09
7216	<i>Plemyria georgii</i> Hulst	30/07-05/09
7217	<i>Thera juniperata</i> (L.)	26/10
7218	<i>Thera contractata</i> (Pack.)	03-04/08
**7219	<i>Thera otisi</i> (Dyar)	
7229	<i>Hydriomena perfracta</i> Swett	31/05-02/07
7235	<i>Hydriomena divisaria</i> (Wlk.)	09/06-19/07
7236	<i>Hydriomena renunciata</i> (Wlk.)	23/05-23/08

**7237	<i>Hydriomena transfigurata</i> Swett	
7254	<i>Hydriomena ruberata</i> (Freyer)	04/06-27/07
7285	<i>Triphosa haesitata affirmaria</i> (Wlk.)	25/05-14/10
7291	<i>Hydia undulata</i> (L.)	29/06-07/08
7292	<i>Hydia prunivora</i> (Fgn.)	26/06
7293	<i>Rheumaptera hastata</i> (L.)	14/06-10/07
7294	<i>Rheumaptera subhastata</i> (Nolcken)	18-28/06
7307	<i>Mesoleuca ruficillata</i> (Gn.)	05/06-02/08
7312	<i>Spargania magnoliata</i> Gn.	14/06-12/09
7313	<i>Spargania luctuata obductata</i> (Mosch.)	23/06
7316	<i>Perizoma basaliata</i> (Wlk.)	29/06-05/09
7320	<i>Perizoma alchemillata</i> (L.)	24/06-22/08
7329	<i>Anticlea vasiliiata</i> Gn.	21/04-21/06
7330	<i>Anticlea multifera</i> (Wlk.)	11-27/06
7368	<i>Xanthorhoe labradorensis</i> (Pack.)	12/06-12/08
7370	<i>Xanthorhoe abrasaria congregata</i> (Wlk.)	18/06-22/07
7371	<i>Xanthorhoe iduata</i> (Gn.)	06-19/07
7384	<i>Xanthorhoe munitata</i> (Hbn.)	17-28/07
7388	<i>Xanthorhoe ferrugata</i> (Cl.)	26/05-29/06
7390	<i>Xanthorhoe lacustrata</i> (Gn.)	31/05-19/08
7394	<i>Epirrhoa alternata</i> (Muller)	12/07-04/09
7399	<i>Euphyia unangulata intermediata</i> (Gn.)	13/06-14/08
7414	<i>Orthonama obstipata</i> (F.)	27/04-26/10
7416	<i>Orthonama centrostrigaria</i> (Woll.)	25/05-06/07
7417	<i>Disclisioprocta stellata</i> (Gn.)	11/10
7419	<i>Hydrelia lucata</i> (Gn.)	14/06-02/09
7420	<i>Hydrelia condensata</i> (Wlk.)	13/06-22/08
7423	<i>Hydrelia albifera</i> (Wlk.)	05-22/07
7425	<i>Venusia cambrica</i> Curt.	12/06-02/09
7428	<i>Venusia comptaria</i> (Wlk.)	11/05-14/06
7430	<i>Trichodezia albovittata</i> (Gn.)	07/06-19/07
7433	<i>Epirrita autumnata</i> henshawi (Swett)	25/09-23/10
7437	<i>Operophtera bruceata</i> (Hulst)	06-10/11
7440	<i>Eubaphe mendica</i> (Wlk.)	23/07-12/08
7445	<i>Horisme intestinata</i> (Gn.)	12/06-05/09
7449	<i>Eupithecia palpata</i> Pack.	28/05-21/07
7459	<i>Eupithecia columbiata</i> (Dyar)	11/05-26/06
7474	<i>Eupithecia miserulata</i> Grt.	16/06-23/10
7476	<i>Eupithecia misturata</i> (Hulst.)	06-16/06
7487	<i>Eupithecia subfuscata</i> (Haw.)	05/06-03/08
7488	<i>Eupithecia tripunctaria</i> H.-S	07/07
7489	<i>Eupithecia lariciata</i> (Freyer)	06/06-11/07
7491	<i>Eupithecia fletcherata</i> Tayl.	14-23/08
7492	<i>Eupithecia casloata</i> (Dyar)	09-29/06
7494	<i>Eupithecia sheppardata</i> McD.	09/06-11/07
7518	<i>Eupithecia intricata taylorata</i> Swett.	18/06
7520	<i>Eupithecia satyrata dodata</i> Tayl.	12/06-23/07
7523	<i>Eupithecia stratonata</i> Pack.	12/06-16/07
7526	<i>Eupithecia russeliata</i> Swett	11/06-07/08
7528	<i>Eupithecia assimilata</i> Doubleday	16/06-06/09
7529	<i>Eupithecia absinthiata</i> (Clerck)	15/06-22/08
7540	<i>Eupithecia perfusca</i> (Hulst)	19/06-24/08
7543	<i>Eupithecia annulata</i> (Hulst)	29/04-09/06

7551	<i>Eupithecia interruptofasciata</i> Pack.	02/10/10
7574	<i>Eupithecia albicapitata</i> Pack.	17/06-21/07
7575	<i>Eupithecia mutata</i> Pears.	26/06-20/07
7594	<i>Eupithecia anticaria</i> Wlk.	11/06-25/07
7605	<i>Eupithecia ravocostaliata</i> Pack.	15/05-29/06
7625	<i>Chloroclystis rectangulata</i> (L.)	05/07-12/08
7635	<i>Acasis viridata</i> (Pack.)	02/06-09/07
7637	<i>Cladara limitaria</i> (Wlk.)	26/04-29/06
7639	<i>Cladara atroliturata</i> (Wlk.)	05/05-29/06
7640	<i>Lobophora nivigerata</i> Wlk.	04/06-01/09
EPIPLEMIDAE (epiplemid moths)		
7650	<i>Callizia amorata</i> Pack.	16/06-14/08
LASIOCAMPIDAE (tent caterpillar and lappet moths)		
: MACROMPHALIINAE		
7673	<i>Tolype laricis</i> (Fitch)	21/08-27/09
: GASTROPACHINAE		
7687	<i>Phyllodesma americana</i> (Harr.)	19/05-10/07
: LASIOCAMPINAE		
7698	<i>Malacosoma disstria</i> Hbn.	05/07-05/09
7701	<i>Malacosoma americanum</i> (F.)	13/07-06/08
SATURNIIDAE (giant silkworm moths)		
: CITHERONIINAE		
7715	<i>Dryocampa rubicunda</i> (F.)	02/06-21/08
: SATURNIINAE		
7757	<i>Antheraea polyphemus</i> (Cram.)	03/06-31/07
7758	<i>Actias luna</i> (L.)	07/06-19/07
7767	<i>Hyalophora cecropia</i> (L.)	13-20/06
7768	<i>Hyalophora columbia</i> (S.I. Smith)	17/06
SPHINGIDAE (hawk moths)		
: SPHINGINAE		
7787	<i>Ceratomia undulosa</i> (Wlk.)	12-24/07
7809	<i>Sphinx kalmiae</i> J.E. Smith	13/06-05/08
7810	<i>Sphinx gordius</i> Cram.	30/05-09/08
7811	<i>Sphinx lucitiosa</i> Clem.	14/07
7812	<i>Sphinx drupiferarum</i> J.E. Smith	17/06
7817	<i>Lapara bombycoides</i> Wlk.	09-18/07
7821	<i>Smerinthus jamaicensis</i> (Drury)	01/06-06/08
7822	<i>Smerinthus cerisyi</i> Kby.	02/06-04/07
7824	<i>Paonias excaecutus</i> (J.E. Smith)	07/06-22/08
7825	<i>Paonias myops</i> (J.E. Smith)	06/06-10/09
7827	<i>Laothoe juglandis</i> (J.E. Smith)	15-27/06
7828	<i>Pachysphinx modesta</i> (Harr.)	04/06-28/07
: MACROGLOSSINAE		
7855	<i>Hemaris diffinis</i> (Bdv.)	27/06
7886	<i>Darapsa pholus</i> (Cram.)	19/06-13/07
7893	<i>Hyles galli</i> (Rottemburg)	26-28/06
NOTODONTIDAE (prominents)		
7895	<i>Closteria albosigma</i> Fitch	06/06-14/08
7898	<i>Closteria strigosa</i> (Grt.)	19-22/06
7901	<i>Closteria apicalis</i> (Wlk.)	06/06-12/07
7915	<i>Nadata gibbosa</i> (J. E. Smith)	07/06-21/09
7917	<i>Hyperaeschra georgica</i> (H.-S.)	24/07
7919	<i>Peridea basitriens</i> (Wlk.)	11/06-14/08

7921	<i>Peridea ferruginea</i> (Pack.)	06/06-04/09
7922	<i>Pheosia rimosa</i> Pack.	05/06-23/08
7926	<i>Notodonta scitipennis</i> Wlk.	12/06-05/08
7928	<i>Notodonta simplaria</i> Graef	02/06-13/08
7931	<i>Gluphisia septentrionis</i> Wlk.	11/06-17/08
7933	<i>Gluphisia avimacula</i> Hudson	22/05-22/06
**7934	<i>Gluphisia litneri</i> (Grt.)	
7939	<i>Furcula occidentalis</i> (Lint.)	18/06-23/07
7941	<i>Furcula modesta</i> (Hudson)	01/06-06/08
7951	<i>Symmerista albifrons</i> (J.E. Smith)	13/06-24/07
7952	<i>Symmerista canicosta</i> Franc.	14/06-20/07
7953	<i>Symmerista leucitys</i> Franc.	14/06-30/07
7958	<i>Dasylophia thyatiroides</i> (Wlk.)	12/06-23/07
7975	<i>Macrurocampa marthesia</i> (Cram.)	11-31/07
7990	<i>Heterocampa umbrata</i> Wlk.	19/06-31/07
7994	<i>Heterocampa guttivitta</i> (Wlk.)	28/05-20/07
7995	<i>Heterocampa biundata</i> Wlk.	10/06-07/09
7998	<i>Lochmaeus manteo</i> Doubleday	28/06-20/09
8005	<i>Schizura ipomoeae</i> Doubleday	17/06-03/10
8006	<i>Schizura badia</i> (Pack.)	29/06
8007	<i>Schizura unicornis</i> (J. E. Smith)	06/06-05/09
8011	<i>Schizura leptinoides</i> (Grt.)	25/06-09/08
8012	<i>Oligocentria semirufescens</i> (Wlk.)	29/06-17/08
8017	<i>Oligocentria lignicolor</i> (Wlk.)	05/07-19/08

ARTIIDAE (tiger moths)

: LITHOSIINAE

8043	<i>Eilema bicolor</i> (Grt.)	25/07
8090	<i>Hypoprepia fucosa tricolor</i> (Fitch)	24/07
8098	<i>Clemensia albata</i> Pack.	07/07-08/08

: ARCTIINAE

8111	<i>Haploa lecontei</i> (Guer.-Meneville)	01/07-06/08
8113	<i>Tyria jacobaeae</i> (L.)	10/07
8114	<i>Holomelina laeta treatii</i> (Grt.)	10/07-07/08
8121	<i>Holomelina aurantiaca</i> (Hbn.)	11-31/07
8123	<i>Holomelina ferruginosa</i> (Wlk.)	11/07-09/08
8129	<i>Pyrrharctia isabella</i> (J. E. Smith)	18/06-24/07
8134	<i>Spilosoma congrua</i> Wlk.	04/06-19/07
8136	<i>Spilosoma dubia</i> (Wlk.)	04/06-24/07
8137	<i>Spilosoma virginica</i> (F.)	07/06-06/09
8140	<i>Hyphantria cunea</i> (Drury)	07/06-18/09
8156	<i>Phragmatobia fuliginosa rubricosa</i> (Harr.)	17-29/06
8158	<i>Phragmatobia assimilans</i> Wlk.	01-27/06
8162	<i>Platarctia parthenos</i> (Harr.)	24/06-08/08
8166	<i>Arctia caja americana</i> (Harr.)	03/08
8175	<i>Grammia virguncula</i> (W. Kirby.)	22/06-24/07
8186	<i>Grammia williamsii</i> (Dodge)	28/06-31/07
8196	<i>Grammia parthenice</i> (W. Kirby)	31/07-22/08
8197	<i>Grammia virgo</i> (L.)	14/07-04/08
8198	<i>Grammia doris</i> (Bdv.)	12/06
8203	<i>Halysidota tessellaris</i> (J. E. Smith)	11/07-22/08
8214	<i>Lophocampa maculata</i> Harr.	05/06-05/08
8230	<i>Cycnia tenera</i> Hbn.	20/06

: CTENUCHINAE

8262	<i>Ctenucha virginica</i> (Esp.)	07/07-09/08
8267	<i>Cisseps fulvicollis</i> (Hbn.)	11/06-01/10

LYMANTRIIDAE (tussock moths)

: ORGYIINAE

8304	<i>Dasychira plagiata</i> (Wlk.)	04/07-08/08
8316	<i>Orgyia leucostigma</i> plagiata (Wlk.)	13/08-10/10
8318	<i>Lymantria dispar</i> (L.)	05/09
8319	<i>Leucoma salicis</i> (L.)	04-24/07

NOCTUIDAE (owlet moths)

: HERMINIINAE

8322	<i>Idia americanalis</i> (Gn.)	28/06-20/09
**8323	<i>Idia aemula</i> Hbn.	
8323.1	<i>Idia</i> n.sp. nr <i>aemula</i>	04/07-18/08
8326	<i>Idia rotundalis</i> (Wlk.)	11/07-06/08
8338	<i>Phalaenophana pyramusalis</i> (Wlk.)	09/06-02/08
8340	<i>Zanclognatha lituralis</i> (Hbn.)	04-13/07
8341	<i>Zanclognatha theralis</i> (Wlk.)	08/07-21/08
8344	<i>Zanclognatha inconspicualis</i> (Grt.)	16/07-07/08
8345	<i>Zanclognatha laevigata</i> (Grt.)	23/07
8349	<i>Zanclognatha protumnusalis</i> (Wlk.)	11/07-10/09
8351	<i>Zanclognatha cruralis</i> (Gn.)	20/06-31/07
8352	<i>Zanclognatha jacobialis</i> (Wlk.)	02/08
8356	<i>Chytolita petrealis</i> Grt.	18/06-24/07
8362	<i>Phalaenostola metonalis</i> (Wlk.)	29/06-09/08
8370	<i>Bleptina caradrinalis</i> Gn.	28/06-04/08
**8384.1	<i>Renia flavipunctalis</i> (Gey.)	
8387	<i>Renia sobrialis</i> (Wlk.)	13/07-07/08
8397	<i>Palthis angulalis</i> (Hbn.)	16/06-05/08

: RIVULINAE

8404	<i>Rivula propinqualis</i> Gn.	19/06-14/08
------	--------------------------------	-------------

: HYPENINAE

8442	<i>Bomolocha baltimorensis</i> (Gn.)	10/06-28/09
8443	<i>Bomolocha bijugalis</i> (Wlk.)	16/06-23/07
8444	<i>Bomolocha palparia</i> (Wlk.)	19/06-26/07
8455	<i>Lomanaltes eductalis</i> (Wlk.)	07/06-31/08
8465	<i>Plathypena scabra</i> (F.)	19/07-12/11
8479	<i>Spargaloma sexpunctata</i> Grt.	03/07

: CATOCALINAE

8490	<i>Pangrapta decoralis</i> Hbn.	02-26/07
8536	<i>Calyptra canadensis</i> (Bethune)	18-26/07
8555	<i>Scoliopteryx libatrix</i> (L.)	28/05
8689	<i>Zale lunata</i> (Drury)	16/08-14/10
8694	<i>Zale aeruginosa</i> (Gn.)	01-27/06
8697	<i>Zale minerea</i> (Gn.)	11/05-10/07
8703	<i>Zale duplicata</i> (Bethune)	08-19/06
8713	<i>Zale lunifera</i> (Hbn.)	06-19/06
8716	<i>Zale unilineata</i> (Grt.)	26/05-09/06
8717	<i>Zale horrida</i> Hbn.	07/06-09/07
8727	<i>Parallelia bistriaris</i> Hbn.	11/06-24/08
8738	<i>Caenurgina crassiuscula</i> (Haw.)	31/05-09/08
8776	<i>Catocala coelebs</i> Grt.	03/08-13/09
8803	<i>Catocala relicta</i> Wlk.	23/08-14/09

8805	<i>Catocala unijuga</i> Wlk.	16/09
8817	<i>Catocala briseis</i> Edw.	09/08-09/09
8833	<i>Catocala concumbens</i> Wlk.	17/08-29/09
8846	<i>Catocala sordida</i> Grt.	08-31/08
8857	<i>Catocala ultronia</i> (Hbn.)	15/08-30/09
8867	<i>Catocala blandula</i> Hulst	31/07
: PLUSIINAE		
8890	<i>Pseudoplusia includens</i> (Wlk.)	28/09-10/10
8896	<i>Diachrysia aereoides</i> (Grt.)	14/07-17/08
8897	<i>Diachrysia balluca</i> Gey.	18/07-11/08
8904	<i>Chrysanthympha formosa</i> (Grt.)	25/07-07/08
8905	<i>Eosphoropteryx thyatiroides</i> (Gn.)	09-25/08
8908	<i>Autographa precationis</i> (Gn.)	12/06-10/10
8909	<i>Autographa rubida</i> Ottol.	20-28/06
8911	<i>Autographa bimaculata</i> (Steph.)	05/09
8912	<i>Autographa mappa</i> (G. & R.)	29/06-21/07
8913	<i>Autographa pseudogamma</i> (Grt.)	28/06
8923	<i>Autographa ampla</i> (Wlk.)	27/06-22/07
8924	<i>Autographa falcifera</i> (Kby.)	31/05-30/09
8925	<i>Syngrapha altera</i> (Ottol.)	11/08
8926	<i>Syngrapha octoscripta</i> (Grt.)	22/08-21/09
8927	<i>Syngrapha epigaea</i> (Grt.)	07-27/09
**8928	<i>Syngrapha selecta</i> (Wlk.)	
8929	<i>Syngrapha viridisigma</i> (Grt.)	26/07-09/09
8939	<i>Syngrapha alias</i> (Ottol.)	07/07-21/08
8940	<i>Syngrapha abstrusa</i> Eichlin & Cunningham	27/06-21/07
8941	<i>Syngrapha cryptica</i> Eichlin & Cunningham	18/08
8942	<i>Syngrapha rectangula</i> (W. Kby.)	12/07-14/08
8950	<i>Plusia putnami</i> Grt.	07-25/07
8953	<i>Plusia venusta</i> Wlk.	25/07
: SARROTHERIPINAE		
8969	<i>Baileya doubledayi</i> (Gn.)	11/06-18/07
8970	<i>Baileya ophthalmica</i> (Gn.)	02/06-16/07
: ACONTIINAE		
9046	<i>Lithacodia bellicula</i> Hbn.	13/06-18/07
9047	<i>Lithacodia muscosa</i> (Gn.)	12/06-04/09
9048	<i>Lithacodia albidula</i> (Gn.)	10/06-29/08
9053	<i>Pseudeustrotia carneola</i> (Gn.)	29/06-21/08
9055.1	<i>Maliattha synochitis</i> (G. & R.)	01/07-01/08
9055.2	<i>Maliattha concinna</i> (Gn.)	09/06-23/07
9059	<i>Capis curvata</i> Grt.	26/06-10/07
9061	<i>Cerma cora</i> Hbn.	04/07
9065	<i>Leuconycta diphteroides</i> (Gn.)	14/06-25/08
9066	<i>Leuconycta lepidula</i> (Grt.)	14/06-24/07
: PANTHEINAE		
9177	<i>Panthea acronyctoides</i> (Wlk.)	06/06-22/08
9183	<i>Panthea pallescens</i> McD.	18-26/07
9184	<i>Colocasia flavidicornis</i> (Sm.)	22/05-21/07
9189	<i>Charadra deridens</i> (Gn.)	17/06-25/07
9193	<i>Raphia frater</i> Grt.	18/06-09/08
: ACRONICTINAE		
9200	<i>Acronicta americana</i> (Harr.)	14/06-17/08
9203	<i>Acronicta dactylina</i> Grt.	07/06-11/09

9205	<i>Acronicta lepusculina</i> Gn.	07/06
9206	<i>Acronicta leporina vulpina</i> (Grt.)	07/06-08/08
9207	<i>Acronicta innotata</i> Gn.	12/06-03/09
9211	<i>Acronicta tritona</i> (Hbn.)	12/06-24/07
9212	<i>Acronicta grisea</i> Wlk.	11/06-29/07
9221	<i>Acronicta funeralis</i> G. & R.	27/06-22/07
9226	<i>Acronicta superans</i> Gn.	07/06-25/08
9229	<i>Acronicta hasta</i> Gn.	07/06-27/07
9237	<i>Acronicta interrupta</i> Gn.	06/06-08/07
9238	<i>Acronicta lobeliae</i> Gn.	16/06-14/08
9241	<i>Acronicta fragilis</i> (Gn.)	02/06-01/09
9249	<i>Acronicta increta</i> Morr.	16/06-19/08
9251	<i>Acronicta retardata</i> (Wlk.)	19/06-06/08
9257	<i>Acronicta impleta</i> Wlk.	04/06-24/07
9259	<i>Acronicta noctivaga</i> Grt.	04/06-18/07
9261	<i>Acronicta impressa</i> Wlk.	28/05-22/08
9264	<i>Acronicta longa</i> Gn.	25/06
9272	<i>Acronicta obliqua</i> (J. E. Smith)	14/06-24/07
9274	<i>Acronicta lanceolaria</i> (Grt.)	07-13/06
9281	<i>Agriopodes fallax</i> (H.-S.)	28/06-07/08
9286	<i>Harrisimemna trisignata</i> (Wlk.)	18/06-07/08

: AGARISTINAE

9318 *Alypia langtoni* Couper 27/06

: AMPHIPYRINAE

9326	<i>Apamea verbascoides</i> (Gn.)	06/07-09/08
9329	<i>Apamea cariosa</i> (Gn.)	12-23/06
9333	<i>Apamea lignicolora</i> (Gn.)	24/06-14/08
9341	<i>Apamea vultuosa</i> (Grt.)	13/06-06/07
9348	<i>Apamea amputatrix</i> (Fitch)	12/06-04/09
9351	<i>Apamea alia</i> (Gn.)	12-16/07
9359	<i>Apamea commoda</i> (Wlk.)	12/07
9360	<i>Apamea impulsa</i> (Gn.)	05-18/07
9362	<i>Apamea remissa indocilis</i> (Wlk.)	11-24/07
9364	<i>Apamea sordens</i> (Hufnagel)	13/06-09/07
9365	<i>Apamea lateritia</i> (Hufn.)	22/07
9367	<i>Apamea dubitans</i> (Wlk.)	31/07-30/09
9367.1	<i>Apamea cogitata</i> (Sm.)	11/07-13/08
9369	<i>Apamea inficita</i> (Wlk.)	25/08
9382	<i>Apamea devastator</i> (Brace)	13/06-02/09
9382.1	<i>Apamea ophiogramma</i> Esper	17/07-07/08
9393	<i>Luperina stipata</i> (Morr.)	04/09
9394	<i>Trichoplezia exornata</i> (Mosch.)	07/07
9396	<i>Eremobina claudens</i> (Wlk.)	02/08-10/09
9398	<i>Eremobina jocasta</i> (Sm.)	20/08-29/09
9404	<i>Oligia modica</i> (Gn.)	07/08
9413	<i>Oligia tonsa</i> (Grt.)	24/07-13/08
9415	<i>Oligia bridghami</i> (G. & R.)	09/08-08/09
9419	<i>Oligia mactata</i> (Gn.)	01-19/09
9420	<i>Oligia illocata</i> (Wlk.)	28/08-10/10
9427	<i>Meropleon diversicolor</i> (Morr.)	16-27/09
9437	<i>Chortodes inquinita</i> (Gn.)	19/07-07/08
9440	<i>Chortodes rufostrigata</i> (Pack.)	01/07
** 9449	<i>Archana oblonga</i> (Grt.)	

** 9452	<i>Macronoctua onusta</i> Grt.	
9453	<i>Celaena reniformis</i> (Grt.)	29/08
9454	<i>Amphipoea velata</i> (Wlk.)	02-29/08
9457	<i>Amphipoea americana</i> Speyer)	22/08-29/09
9473	<i>Papaipema impecuniosa</i> (Grt.)	16/09-13/10
9480	<i>Papaipema pterisii</i> Bird	15/09-10/10
9483	<i>Papaipema inquaesita</i> (G. & R.)	09/09
9486	<i>Papaipema birdi</i> (Dyar)	05/09
9490	<i>Papaipema nepheleptena</i> (Dyar)	26/09
9496	<i>Papaipema nebris</i> (Gn.)	05/09
9501	<i>Papaipema eupatorii</i> (Lyman)	04-29/09
9509	<i>Papaipema unimoda</i> (Sm.)	10/09-09/10
9514	<i>Hydraecia micacea</i> (Esp.)	23/08-29/09
9525	<i>Bellura obliqua</i> (Wlk.)	18/06-17/07
9545	<i>Euplexia benesimilis</i> McD.	05/06-25/07
9546	<i>Phlogophora iris</i> Gn.	05/06-25/07
9547	<i>Phlogophora periculosa</i> Gn.	24/07-28/09
9549	<i>Enargia decolor</i> (Wlk.)	22/08-13/09
9550	<i>Enargia infumata</i> (Grt.)	25/07-29/08
9555	<i>Ipimorpha pleonectusa</i> Grt.	29/09
9556	<i>Chytonix palliatricula</i> (Gn.)	06/06-08/08
9560	<i>Dipterygia rozmani</i> Berio	27/06
9564	<i>Andropolia contacta</i> (Wlk.)	31/07-09/08
9578.1	<i>Hyppa 'xylinoides'</i> (Gn.)	10/06-30/09
9578.2	<i>Hyppa 'ancocisconensis'</i> (Morr.)	19/06-25/08
9582	<i>Nedra ramosula</i> (Gn.)	01/06-23/08
9631	<i>Callopistria molissima</i> (Gn.)	05-17/07
9633	<i>Callopistria cordata</i> (Ljungh)	15/06-14/08
9637	<i>Magusa orbifera</i> (Wlk.)	17/09
9638	<i>Amphipyra pyramidoides</i> (Gn.)	05/07-29/09
9639	<i>Amphipyra tragopoginis</i> (Cl.)	09/08-12/09
9647	<i>Athetis miranda</i> (Grt.)	14/06-04/08
9653	<i>Caradrina morpheus</i> (Hufn.)	30/06-06/08
9657	<i>Caradrina multifera</i> (Wlk.)	14-31/08
9664	<i>Balsa labecula</i> (Grt.)	11/07-01/08
**9662	<i>Balsa malana</i> (Fitch)	
9666	<i>Spodoptera frugiperda</i> (J. E. Smith)	16/06-17/08
9669	<i>Spodoptera ornithogalli</i> (Gn.)	31/05
9678	<i>Elaphria versicolor</i> (Grt.)	02/06-30/07
9681	<i>Elaphria festivoides</i> (Gn.)	06/06-06/08
9696	<i>Condica vecors</i> (Gn.)	09-28/06

: CUCULLIINAE

9873	<i>Xylena nupera</i> (Lint.)	20/04-02/05
9874	<i>Xylena curvimacula</i> (Morr.)	27/09-19/04
9875	<i>Xylena thoracica</i> (Putnam-Cramer)	11-31/05
9876	<i>Xylena cineritia</i> (Grt.)	26/04-29/05
9878	<i>Lithomia germana</i> (Morr.)	18/08-09/09
9881	<i>Homoglaea hircina</i> Morr.	22/03-25/05
9884	<i>Litholomia napaea</i> (Morr.)	17/05-01/10
9888	<i>Lithophane innominata</i> (Sm.)	28/09-20/03
9889	<i>Lithophane petulca</i> Grt.	24/04-13/06
9891	<i>Lithophane amanda</i> (Sm.)	25/05
9892	<i>Lithophane disposita</i> Morr.	09-20/05

9893	<i>Lithophane hemina</i> Grt.	20/04-10/06
9902	<i>Lithophane baileya</i> Grt.	26/09-25/05
9909	<i>Lithophane tepida</i> Grt.	26/09-09/05
9913	<i>Lithopphane georgii</i> Grt.	26/09-21/05
9915	<i>Lithophane grotei</i> Riley	17/10
9916	<i>Lithophane unimoda</i> (Lint.)	20/05
9917	<i>Lithophane fagina</i> Morr.	27/09-11/04
9922	<i>Lithophane pexata</i> Grt.	27/09-22/04
9928	<i>Lithophane thaxteri</i> Grt.	01/06
9933	<i>Eupsilia vinulenta</i> (Grt.)	29/09-27/03
9935	<i>Eupsilia tristigmata</i> (Grt.)	26-28/09
9936	<i>Eupsilia morrisoni</i> (Grt.)	26/05
9939	<i>Eupsilia devia</i> (Grt.)	22/04-17/05
9943	<i>Metaxaglaea inulta</i> (Grt.)	17/09
9947	<i>Epiglaea apiata</i> (Grt.)	11/09
9952	<i>Eucirroedia pampina</i> (Gn.)	29/08-02/10
9957	<i>Sunira bicolorago</i> (Gn.)	05/09-10/11
9961	<i>Anathix ralla</i> (G. & R.)	22-24/08
9965	<i>Xanthia</i> n.sp. nr <i>togata</i>	19/09-09/10
9967	<i>Hillia iris</i> (Zeit.)	26/09
9976	<i>Platypolia anceps</i> (Steph.)	12-28/09
9980	<i>Xylotype acadia</i> B. & Benj.	04/09
9985	<i>Mniotype miniota</i> (Grt.)	01/06-09/07
9989	<i>Sutyna privata</i> (Wlk.)	25/08-27/09
9998	<i>Brachylomia algens</i> (Grt.)	09/09
10005	<i>Feralia jocosa</i> (Gn.)	11/05-29/06
10008	<i>Feralia comstocki</i> (Grt.)	12/05-27/06
10011	<i>Brachionycha borealis</i> (Sm.)	08-17/05
10055	<i>Apharetra dentata</i> (Grt.)	19/07-05/09
10065	<i>Homohadena infixa</i> (Wlk.)	23/07-05/09
10123	<i>Oncocnemis piffardi</i> (Wlk.)	23-31/08
10194	<i>Cucullia intermedia</i> Speyer	09-28/06
10197/8	<i>Cucullia florea</i> Gn./ <i>postera</i> Gn. complex	11/06-23/08
10199	<i>Cucullia omissa</i> Dod	12/06-07/07
10202	<i>Cucullia convexipennis</i> G. & R.	19/07-18/08

: HADENINAE

10265	<i>Sideridis rosea</i> (Harv.)	03-28/06
10266	<i>Sideridis congermana</i> (Morr.)	26/06-19/07
10268	<i>Sideridis maryx</i> (Gn.)	11-26/06
10272	<i>Mamestra curialis</i> (Sm.)	18-24/06
10275	<i>Polia nimbosa</i> (Gn.)	10/07-09/08
10276	<i>Polia imbrifera</i> (Gn.)	03/07-09/08
10280	<i>Polia purpurissata</i> (Grt.)	17/07-21/08
10288	<i>Polia detracta</i> (Wlk.)	29/06-08/08
10292	<i>Melanchra adjuncta</i> (Harr.)	06/06-06/08
10293	<i>Melanchra picta</i> (Harr.)	16/06-18/07
10294	<i>Melanchra pulverulenta</i> (Sm.)	12/06-25/07
10295	<i>Melanchra assimilis</i> (Morr.)	11/06-20/07
10297	<i>Lacanobia atlantica</i> (Grt.)	12/06
10298	<i>Lacanobia radix</i> (Wlk.)	05/06-20/07
10299	<i>Lacanobia subjuncta</i> (G. & R.)	21/06
10300	<i>Spiramater grandis</i> (Gn.)	05/06-20/07
10301	<i>Spiramater lutra</i> (Gn.)	06/06-25/07

10302	<i>Trichordestra rugosa</i> (Morr.)	09/06
10303	<i>Trichordestra tacoma</i> (Stkr.)	31/05-25/07
10304	<i>Trichordestra legitima</i> (Grt.)	11/06-11/08
10307	<i>Trichordestra lilacina</i> (Harv.)	10-13/07
**10310	<i>Papestra quadrata ingravis</i> (Sm.)	
10311	<i>Papestra biren</i> (Goeze)	21/06
10312	<i>Papestra cristifera</i> (Wlk.)	11-12/06
10368	<i>Lacinipolia meditata</i> (Grt.)	08/08
10370	<i>Lacinipolia lustralis</i> (Grt.)	20/06-30/07
10372	<i>Lacinipolia anguina</i> (Grt.)	05-29/06
10397	<i>Lacinipolia renigera</i> (Steph.)	05/07-03/09
10405	<i>Lacinipolia lorea</i> (Gn.)	18/06-30/08
10406	<i>Lacinipolia olivacea</i> (Morr.)	11/07-09/09
10431	<i>Faronta diffusa</i> (Wlk.)	11/06-27/07
10436	<i>Aletia oxygala luteopallens</i> (Sm.)	24/07-15/08
10438	<i>Pseudalezia unipuncta</i> (Haw.)	26/04-06/11
10440	<i>Leucania linita</i> Gn.	04/07
10444	<i>Leucania phragmatidicola</i> Gn.	31/08
10446	<i>Leucania multilinea</i> (Wlk.)	10/07-19/08
10447	<i>Leucania commoides</i> Gn.	11-12/07
10449	<i>Leucania insueta</i> Gn.	25/06-26/07
10459	<i>Leucania inermis</i> (Fbs.)	29/06-12/07
10487	<i>Orthosia rubescens</i> (Wlk.)	08/05-29/06
10490	<i>Orthosia revicta</i> (Morr.)	08/05-29/06
10495	<i>Orthosia hibisci</i> (Gn.)	19/04-28/05
10501	<i>Crocigrapha normani</i> (Grt.)	12/05-27/06
10513	<i>Egira dolosa</i> (Grt.)	14-29/05
10520	<i>Morrisonia evicta</i> (Grt.)	12/05-29/06
10521.1	<i>Morrisonia latex</i> (Gn.)	31/05-19/07
10524	<i>Nephelodes minians</i> Gn.	17/08-12/09
10532	<i>Homorthodes furfurata</i> (Grt.)	19/07
10563	<i>Protorthodes oviduca</i> (Gn.)	04/06-10/07
10578	<i>Pseudorthodes vecors</i> (Gn.)	20/06-25/07
**10585	<i>Orthodes crenulata</i> (Butler)	
10587	<i>Orthodes cynica</i> Gn.	06/06-04/08
10589.1	<i>Orthodes goodelli</i> (Grt.)	05-18/07
10627	<i>Tricholita signata</i> (Wlk.)	31/07-28/08

: NOCTUINAE

10644	<i>Agrotis mollis</i> Wlk.	11-27/07
10651	<i>Agrotis venerabilis</i> Wlk.	02-19/09
10663	<i>Agrotis epsilon</i> (Hufn.)	20/05-23/10
10670	<i>Feltia jaculifera</i> (Gn.)	18/08
**10674	<i>Feltia subgothica</i> (Haw.)	
10676	<i>Feltia herilis</i> (Grt.)	11/08-09/09
10702	<i>Euxoa divergens</i> (Wlk.)	22/08
10705	<i>Euxoa messoria</i> (Harr.)	20/08-27/09
10714	<i>Euxoa quebecensis</i> (Sm.)	29/06
10738	<i>Euxoa mimallonis</i> (Grt.)	23-26/08
10755	<i>Euxoa declarata</i> (Wlk.)	22/08-08/09
10780	<i>Euxoa comosa ontario</i> (Sm.)	04/08-13/10
10781	<i>Euxoa fumalis</i> (Grt.)	02/10
10801	<i>Euxoa ochrogaster</i> (Gn.)	10-28/08
10865	<i>Euxoa perpolita</i> (Morr.)	23/08-08/09

10891	<i>Ochropleura plecta</i> (L.)	14/06-31/08
10915	<i>Peridroma saucia</i> (Hbn.)	10/08
10917	<i>Diaris rubifera</i> (Grt.)	23/07-30/08
10919	<i>Diaris jucunda</i> (Wlk.)	04/07-22/08
10922	<i>Diaris freemani</i> Hdwk	22/06-27/07
10924	<i>Actebia fennica</i> (Tauscher)	29/06-23/09
10926	<i>Spaelotis clandestina</i> (Harr.)	05/07-28/09
10928	<i>Graphiphora augur haruspica</i> (Grt.)	16/07-15/08
10929	<i>Eurois occulta</i> (L.)	29/06-17/09
10930	<i>Eurois astricula</i> Morr.	16/07-05/09
10942a	<i>Xestia c-nigrum adela</i> Franc.	18/07-18/08
10942.1	<i>Xestia dolosa</i> Franc.	05-15/06
10943	<i>Xestia normaniana</i> (Grt.)	24/07-05/09
10944	<i>Xestia smithii</i> (Snell.)	26/07-12/09
10947	<i>Xestia oblata</i> (Morr.)	28/06-30/07
10950	<i>Xestia bicarnea</i> (Gn.)	09-22/08
10951	<i>Xestia tenuicula</i> (Morr.)	26/07-27/08
10962	<i>Xestia perquiritata</i> (Morr.)	24/07-23/08
**10964	<i>Xestia homogena</i> McD.	
**10967	<i>Xestia elimata</i> (Gn.)	
10968	<i>Xestia badicollis</i> (Grt.)	03/08-12/09
10970	<i>Xestia youngii</i> (Sm.)	23-25/08
**10992	<i>Paradiarsia liorialis</i> (Pack.)	
10993a	<i>Hemipachnobia subporphyrea monochromatea</i> (Morr.)	27-29/06
10994	<i>Cerastis tenebrifera</i> (Wlk.)	15/05-06/06
10996	<i>Metalepsis salicarum</i> (Wlk.)	03/05-29/06
10997	<i>Metalepsis fischii</i> (Grt.)	22/05
10999	<i>Aplectoides condita</i> (Gn.)	10/06-20/07
11000	<i>Anaplectoides prasina</i> (D. & S.)	26/09-17/09
11001	<i>Anaplectoides pressus</i> (Grt.)	27/06-15/08
11004	<i>Protolampra rufipectus</i> (Morr.)	25/07-06/09
11008	<i>Eueretagrotis perattenta</i> (Grt.)	29/06-19/08
11009	<i>Eueretagrotis attenta</i> (Grt.)	24/06-22/08
11010	<i>Heptagrotis phyllophora</i> (Grt.)	25/06-06/08
11012	<i>Cryptocala acadiensis</i> (Bethune)	16/07-19/08
11029	<i>Abagrotis alternata</i> (Grt.)	25/07-05/09
11043	<i>Rhychagrotis cupida</i> (Grt.)	10/08
11044	<i>Rhychagrotis brunneipennis</i> (Grt.)	18/08
11050.1	<i>Noctua pronuba</i> (L.)	20/07-01/10
11051	<i>Ufeus satyricus</i> Grt.	06-16/10
: HELIOTHINAE		
11064	<i>Pyrrhia exprimens</i> (Wlk.)	22/06-22/07
11068	<i>Helicoverpa zea</i> (Gn.)	03-29/09
11164	<i>Schinia florida</i> (Gn.)	02-20/07

**Plate I. Adults: Hepialidae; Cossidae; Saturniidae: Saturniinae; Sphingidae: Sphinginae,
Macroglossinae; Arctiidae: Arctiinae; Noctuidae: Catocalinae.**

- | | | |
|-----|---|------------------------------|
| 1] | 20 <i>Sthenopis quadriguttatus</i> (Grt.) | [Hepialidae] |
| 2] | 2693 <i>Prionoxystus robiniae</i> (Peck), female | [Cossidae] |
| 3] | 2693 <i>Prionoxystus robiniae</i> (Peck), male | [Cossidae] |
| 4] | 7812 <i>Sphinx drupiferarum</i> J.E. Smith | [Sphingidae: Sphinginae] |
| 5] | 7828 <i>Pachysphinx modesta</i> (Harr.) | [Sphingidae: Sphinginae] |
| 6] | 7893 <i>Hyles galli</i> (Rottemburg) | [Sphingidae: Macroglossinae] |
| 7] | 8803 <i>Catocala relicta</i> Wlk. | [Noctuidae: Catocalinae] |
| 8] | 7768 <i>Hyalophora columbia</i> (S.I. Smith) | [Saturniidae: Saturniinae] |
| 9] | 8162 <i>Platarctia parthenos</i> (Harr.) | [Arctiidae: Arctiinae] |
| 10] | 8166 <i>Arctia caja americana</i> (Harr.) | [Arctiidae: Arctiinae] |
| 11] | 7809 <i>Sphinx kalmiae</i> J. E. Smith | [Sphingidae: Sphinginae] |
| 12] | 8833 <i>Catocala concumbens</i> Wlk. | [Noctuidae: Catocalinae] |
| 13] | 8857 <i>Catocala ultronia</i> (Hbn.) | [Noctuidae: Catocalinae] |

Scale Bar = 5 cm

PLATE I

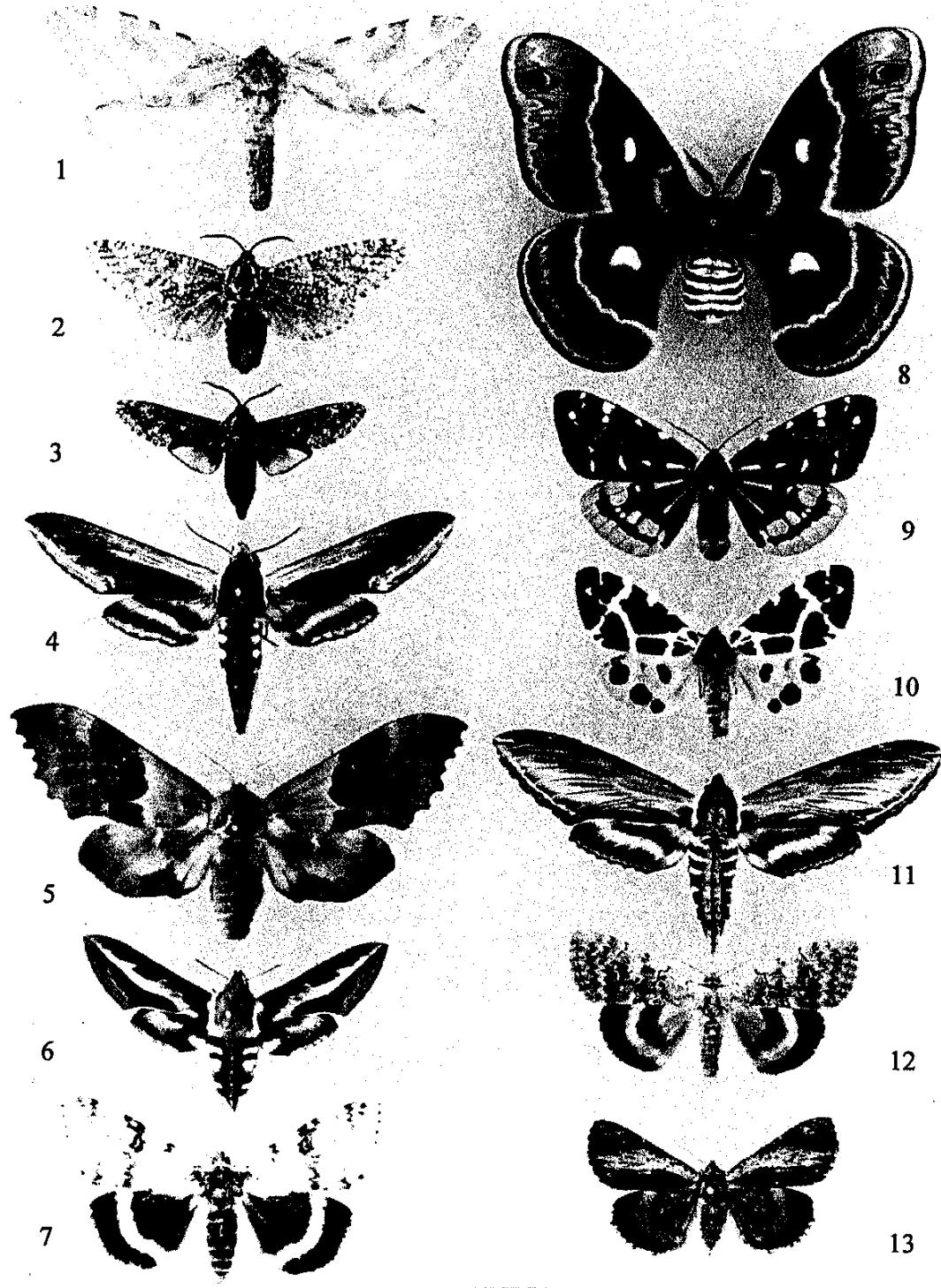


Plate II. A. Adults: Sesiidae: Sesiinae; Limacodidae; Geometridae: Archierinae, Oenochrominae, Ennominae, Geometrinae, Sterrhinae, Larentiinae; Epiplemidae; Lasiocampidae: Macromphaliinae; Arctiidae: Lithosiinae, Arctiinae; Noctuidae: Herminiinae, Rivulinae, Hypeninae, Sarrothripinae, Acontiinae.

- | | |
|--|----------------------------------|
| 1] 6256 <i>Archieras infans</i> (Mosch.) | [Geometridae: Archierinae] |
| 2] 6258 <i>Alsophila pometaria</i> (Harr.) | [Geometridae: Oenochrominae] |
| 3] 8156 <i>Phragmatobia fuliginosa rubricosa</i> (Harr.) | [Arctiidae: Arctiinae] |
| 4] 8090 <i>Hypoprepia fucosa tricolor</i> (Fitch) | [Arctiidae: Lithosiinae] |
| 5] 8196 <i>Grammia parthenice</i> (W. Kirby) | [Arctiidae: Arctiinae] |
| 6] 7307 <i>Mesoleuca ruficillata</i> (Gn.) | [Geometridae: Larentiinae] |
| 7] 8114 <i>Holomelina laeta treatii</i> (Grt) | [Arctiidae: Arctiinae] |
| 8] 8970 <i>Baileya ophthalmica</i> (Gn.) | [Noctuidae: Sarrothripinae] |
| 9] 7650 <i>Callizzia amorata</i> Pack. | [Epiplemidae] |
| 10] 8969 <i>Baileya doubledayi</i> (Gn.) | [Noctuidae: Sarrothripinae] |
| 11] 7673 <i>Tolype laricis</i> (Fitch), male | [Lasiocampidae: Macromphaliinae] |
| 12] 7139 <i>Cyclophora pendulinaria</i> (Gn.) | [Geometridae: Sterrhinae] |
| 13] 9047 <i>Lithacodia muscosula</i> (Gn.) | [Noctuidae: Acontiinae] |
| 14] 9053 <i>Pseudeustrotia carneloa</i> (Gn.) | [Noctuidae: Acontiinae] |
| 15] 9046 <i>Lithacodia bellicula</i> Hbn. | [Noctuidae: Acontiinae] |
| 16] 7009 <i>Nematocampa resistaria</i> (H.-S.) | [Geometridae: Ennominae] |
| 17] 7058 <i>Synchlora aerata</i> (F.) | [Geometridae: Geometrinae] |
| 18] 7605 <i>Eupithecia ravocostaliata</i> Pack. | [Geometridae: Larentiinae] |
| 19] 4659 <i>Packardia geminata</i> (Pack.) | [Limacodidae] |
| 20] 2554 <i>Synanthedon acerni</i> (Clem.) | [Sesiidae: Sesiinae] |
| 21] 8322 <i>Idia americalis</i> (Gn.) | [Noctuidae: Herminiinae] |
| 22] 8351 <i>Zanclognatha cruralis</i> (Gn.) | [Noctuidae: Herminiinae] |
| 23] 8404 <i>Rivula propinqualis</i> Gn. | [Noctuidae: Rivulinae] |
| 24] 8397 <i>Palthis angulalis</i> (Hbn.) | [Noctuidae: Herminiinae] |
| 25] 8442 <i>Bomolocha baltimorensis</i> (Gn.) | [Noctuidae: Hypeninae] |

Scale Bar = 5cm

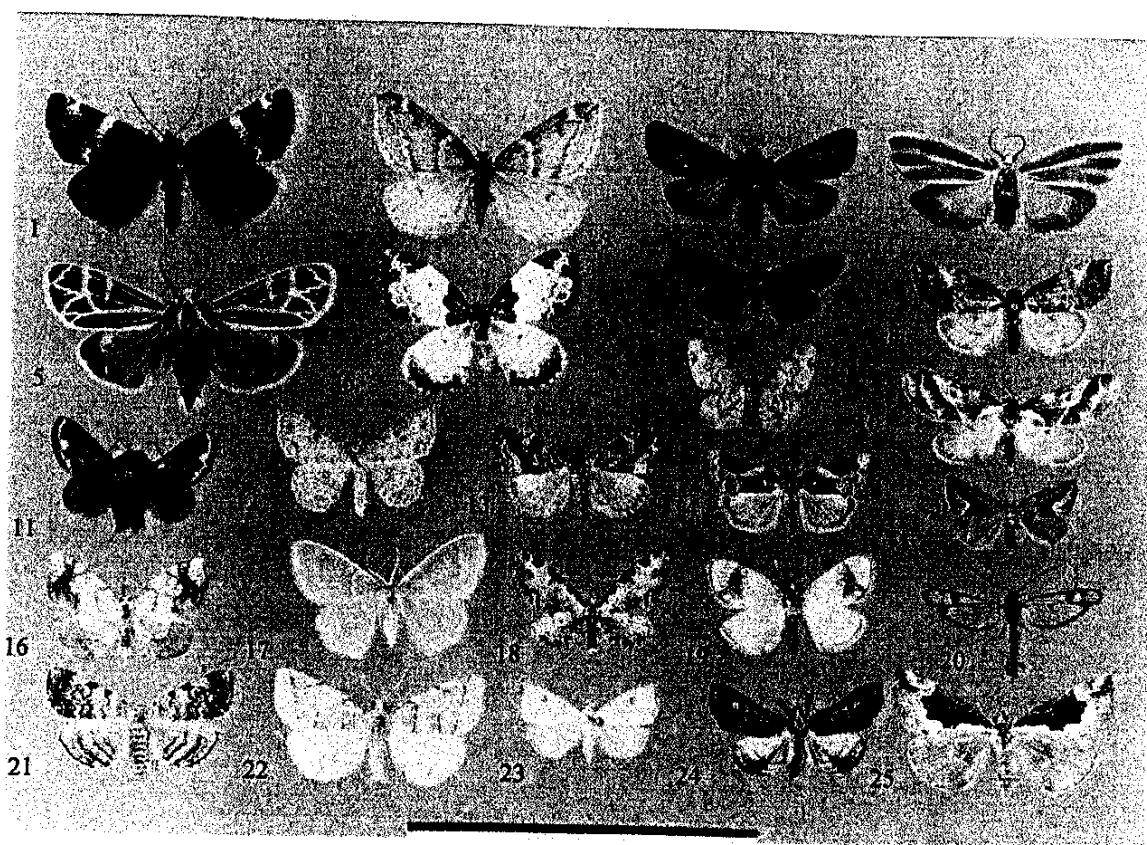
Plate II. B. Adults: Thyatiridae: Thyatirinae; Drepanidae: Drepaninae; Lasiocampidae: Macromphaliinae, Gastropachinae, Lasiocampinae; Saturniidae: Citheroniinae; Sphingidae: Macroglossinae; Notodontidae; Arctiidae: Arctiinae; Lymantriidae: Orgyiinae.

- | | |
|--|----------------------------------|
| 1] 6235 <i>Habrosyne scripta</i> (Gosse) | [Thyatiridae: Thyatirinae] |
| 2] 6240 <i>Euthyatira pudens</i> (Gn.) | [Thyatiridae: Thyatirinae] |
| 3] 6251 <i>Drepana arcuate</i> Wlk. | [Drepanidae: Drepaninae] |
| 4] 7363 <i>Tolype laricis</i> (Fitch), female | [Lasiocampidae: Macromphaliinae] |
| 5] 7687 <i>Phyllodesma americana</i> (Harr.) | [Lasiocampidae: Gastropachinae] |
| 6] 7701 <i>Malacosoma americanum</i> (F.) | [Lasiocampidae: Lasiocampinae] |
| 7] 7715 <i>Dryocampa rubicunda</i> (F.) | [Saturniidae: Citheroniinae] |
| 8] 7855 <i>Hemaris diffinis</i> (Bdv.) | [Sphingidae: Macroglossinae] |
| 9] 7921 <i>Peridea ferruginea</i> (Pack.) | [Notodontidae] |
| 10] 8113 <i>Tyria jacobaeae</i> (L.) | [Arctiidae: Arctiinae] |
| 11] 8175 <i>Grammia virguncula</i> (W.Kby.) | [Arctiidae: Arctiinae] |
| 12] 8304 <i>Dasychira plagiata</i> (Wlk.) | [Lymantriidae: Orgyiinae] |

Scale Bar = 5cm

PLATE II

A



B

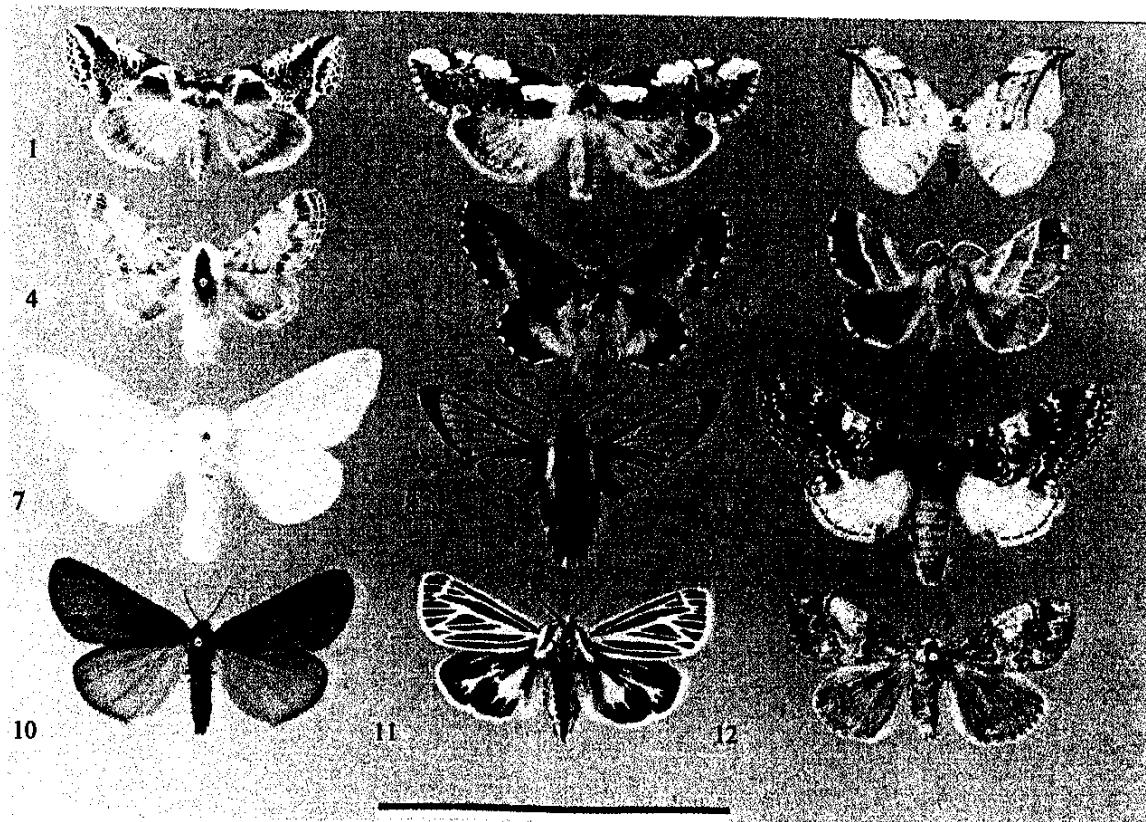


Plate III. Adults: Geometridae: Ennominae; Arctiidae: Ctenuchinae; Noctuidae: Plusiinae, Pantheinae, Acronictinae, Agaristinae, Amphiptyrinae, Cuculliinae, Hadeninae, Noctuinae, Heliothinae.

1]	10275 <i>Polia nimbosa</i> (Gn.)	[Noctuidae: Hadeninae]
2]	8911 <i>Autographa bimaculata</i> (Steph.)	[Noctuidae: Plusiinae]
3]	10123 <i>Oncocnemis piffardi</i> (Wlk.)	[Noctuidae: Cuculliinae]
4]	9638 <i>Amphiptyra pyramidoides</i> Gn.	[Noctuidae: Amphiptyrinae]
5]	9183 <i>Panthea pallescens</i> McD.	[Noctuidae: Pantheinae]
6]	9318 <i>Alypia langtoni</i> Couper	[Noctuidae: Agaristinae]
7]	9286 <i>Harrisimemna trisignata</i> (Wlk.)	[Noctuidae: Acronictinae]
8]	10738 <i>Euxoa mimallonis</i> (Grt.)	[Noctuidae: Noctuinae]
9]	9874 <i>Xylena curvimacula</i> (Morr.)	[Noctuidae: Cuculliinae]
10]	11012 <i>Cryptocala acadiensis</i> (Bethune)	[Noctuidae: Noctuinae]
11]	11050.1 <i>Noctua pronuba</i> (L.)	[Noctuidae: Noctuinae]
12]	9637 <i>Magusa orbifera</i> (Wlk.)	[Noctuidae: Amphiptyrinae]
13]	8904 <i>Chrysanthympha formosa</i> (Grt.)	[Noctuidae: Plusiinae]
14]	8942 <i>Syngrapha rectangula</i> (W. Kby.)	[Noctuidae: Plusiinae]
15]	11164 <i>Schinia florida</i> (Gn.)	[Noctuidae: Heliothinae]
16]	11068 <i>Helicoverpa zea</i> (Boddie)	[Noctuidae: Heliothinae]
17]	10663 <i>Agrotis epsilon</i> (Hufn.)	[Noctuidae: Noctuinae]
18]	8262 <i>Ctenucha virginica</i> (Esp.)	[Arctiidae: Ctenuchinae]
19]	11064 <i>Pyrrhia exprimens</i> (Wlk.)	[Noctuidae: Heliothinae]
20]	9226 <i>Acronicta superans</i> Gn.	[Noctuidae: Acronictinae]
21]	6863 <i>Caripeta divisata</i> Wlk.	[Geometridae: Ennominae]
22]	6864 <i>Caripeta piniata</i> (Pack.)	[Geometridae: Ennominae]
23]	6867 <i>Caripeta angustiorata</i> Wlk.	[Geometridae: Ennominae]
24]	6842 <i>Plagodis phlogosaria</i> (Gr.)	[Geometridae: Ennominae]
25]	6840 <i>Plagodis serinaria</i> H.-S.	[Geometridae: Ennominae]
26]	6743 <i>Xanthotype sospeta</i> (Drury)	[Geometridae: Ennominae]
27]	6740 <i>Xanthotype urticaria</i> Swett	[Geometridae: Ennominae]
28]	6982 <i>Prochoerodes transversata</i> (Drury)	[Geometridae: Ennominae]
29]	6797 <i>Ennomos magnaria</i> Gn.	[Geometridae: Ennominae]
30]	6796 <i>Campaea perlata</i> (Gn.)	[Geometridae: Ennominae]
31]	6818 <i>Selenia kentaria</i> (G. & R.)	[Geometridae: Ennominae]
32]	6817 <i>Selenia alciphearia</i> Wlk.	[Geometridae: Ennominae]
33]	6725 <i>Euchlaena muzaria</i> (Wlk.)	[Geometridae: Ennominae]
34]	6799 <i>Epirrhantthis substriataria</i> (Hulst)	[Geometridae: Ennominae]
35]	6963 <i>Tetracis crocallata</i> Gn.	[Geometridae: Ennominae]
36]	6964 <i>Tetracis cachexiata</i> Gn.	[Geometridae: Ennominae]
37]	6898 <i>Cingilia catenaria</i> (Drury)	[Geometridae: Ennominae]
38]	6651 <i>Lycia ursaria</i> (Wlk.)	[Geometridae: Ennominae]
39]	6640 <i>Biston betularia cognataria</i> (Gn.)	[Geometridae: Ennominae]
40]	6763 <i>Nacophora queraria</i> (J. E. Smith)	[Geometridae: Ennominae]
41]	6658 <i>Phigalia titea</i> (Cram.)	[Geometridae: Ennominae]

Scale Bar = 5 cm

PLATE III

