Additions to the Catalogue of Butterflies and Moths collected in the Neighbourhood of Halifax, etc., Nova Scotia.—By Joseph Perrin, McNab's Island, Halifax.

(Read 12 April 1915)

In the Transactions of this Institute, volume xii, part 3 (for 1908-09), Halifax, 1912, pages 258-290, there was published a Catalogue of Butterflies and Moths mostly collected in the neighbourhood of Halifax and Digby, by the present writer and Mr. John Russell, then of the latter place. Since 1909 the writer has continued collecting these insects, and has also received specimens and records of captures from Mr. George E. Sanders, field officer of the Department of Agriculture, entomological laboratory, Bridgetown, Annapolis County, N. S., and from Mr. E. Chesley Allen of Yarmouth, N. S. To those two gentlemen I wish to express my thanks.

In the present supplementary paper there is presented a list of two Butterflies and sixty Moths which were not previously reported; with additional remarks on species before listed, and on such as have been taken at Halifax for the first time. These notes are arranged in two groups:

(a) species not hitherto reported from Nova Scotia, and (b) additional notes on species previously reported.

Our previous catalogue contained 60 nominal species and varieties of Butterflies, and 480 of Moths; total 540. The present supplement brings the number up to 62 Butterflies and 540 Moths, total 602.

Thé nomenclature and arrangement is that of Dr. Harrison G. Dyar's List of North American Lepidoptera (Bulletin U. S. National Museum, No. 52; Washington, 1902), and his numbers are prefixed.

All the specimens from McNab's Island (which is situated in the mouth of Halifax Harbour) were taken by myself; other localities have attached the names of those responsible for the records for those places. As before, doubtful specimens have been referred, as far as possible, to specialists for their opinion.

Species not hitherto reported from Nova Scotia.

Order LEPIDOPTERA.

# RHOPALOCERA (Butterflies).

Superfamily Papilionoidea.

Family PIERIDÆ.

- 65. Eurymas eurytheme Bois. MacNab's Is., Halifax; Sept. 4, 1910, female; Sept. 12, 1913, male. (Perrin).
- 432. Rusticus scudderi Edw. South East Passage, Halifax County; July 3, 1911, one male; and August 9, 1914, one male and one female. (Perrin).

# HETEROCERA (Moths).

Superfamily Sphingoidea.

Family Sphingidæ.

- 706. Sphinx chersis Hübner. Digby, N. S.; July 26, 1907. (Russell).
- 721. Ceratomia amyntor Geyer. Bridgetown; June 16, 1913. (Sanders).

# Superfamily BOMBYCOIDEA. Family LITHOSIDE.

808. Hypoprepia fucosa Hübner. Yarmouth; July 27, 1913. (Allen).

Family ARCTHOÆ.

- 828. Eubaphe læta Guérin. Deerfield, Yarmouth Co.; July 28, 1913. (Allen).
- 853. Estigmene prima Slosson. South East Passage, Halifax Co.; June 9, 1912. (Perrin).

# Family Nocture.

# Subfamily Noctuinæ.

- 960. Panthea acronyctoides Walker. MacNab's Is.; June 15, 1912.
- 1158. Hadena modica Guenée. MacNab's Is.; August 20, 1909, at light.
- 1418. Platagrotis pressa Grote. MacNab's Is.; July 15, 1912, at light.
- 1455. Agrotis geniculata Grote & Robinson. Deerfield, Yarmouth Co., August 16, 1911. (Allen).
- 1788. Mamestra liquida Grote. MacNab's Is.; July 14, 1911, at light.
- 2060. Tricholita signata Walker. MacNab's Is.; August 6, 1911.
- 2078. Xylina disposita Morrison. MacNab's Is.; Sept. 26, 1913, at light.
- 2079. X. petulca Grote. MacNab's Is.; Oct. 21, 1912.
- 2090. X. antennata Walker. Bridgetown; Sept. 17, 1913. (Sanders).
- 2092. X. grotei Riley. (X. cinerosa Grote.) Bridgetown; Oct. 11, 1913. (Sanders).
- 2095. X. innominata Smith. Bridgetown. (Sanders).
- 2102. X. georgii Grote. Bridgetown; Sept. 24, 1913. (Sanders).
- 2106. X. unimoda Lintner. Bridgetown; Oct. 17, 1913. (Sanders).
- —. Hydroecia micacea Esp. Bridgetown; Oct. 10, 1912. (Sanders).
- 2244. Scopelosoma devia Grote. Yarmouth; May 17, 1913. (Allen).

#### Subfamily Catocaling.

- 2905. Catocala gracilis Edw. MacNab's Is.; Aug. 21, 1914.
- 3006. Erebus odora Linn. Yarmouth; about June 20, 1906. (Allen).

Subfamily HYPENINÆ.

3039. Chytolita morbidatis Guenée. MacNab's Is.; July 8, 1912, at light.

# Family NYCTEOLIDE.

3083. Nycteola revayana Scopoli. MacNab's Is.; Sept. 19, 1914.

Family LASIOCAMPIDE.

3221c. Malacosoma disstria erosa Stretch. MacNab's Is.; July 8, 1911, at light (Perrin); common at Bridgetown (Sanders).

#### Family GEOMETRIDE.

Subfamily Hydriomenine.

3352. Eustroma triangulata. Deerfield, Yarmouth Co.; July 28, 1913 (Allen)

#### Subfamily Sterrhings.

- 3551. Eois anticaria Walker. MacNab's Is.; July 7, 1910.

  Subfamily Geometring.
- 3578. Synchlora ærata Fab. MacNab's Is.; July 9, 1912, at light.

Subfamily Ennomines.

- 3881. Phigalia titea Cramer. MacNab's Is.; April 27, 1914.
- 3898. Anagoga pulveraria Linn. MacNab's Is.; July 14, 1907.
- 3931. Plagodis phlogosaria Guenée. MacNab's Is.; July 14, 1914. There is some uncertainty as to the determination of this specimen. It was at first named Plagodis altruaria by Dr. Henry Skinner of the Academy of Natural Sciences, Philadelphia, after inspection of the specimen itself. This name does not appear in Dyar's List and possibly is a

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new one. Subsequently it was determined as *Plagodis phlogosaria*, Guenée, by Mr. Albert F. Winn of Westmount, Montreal, from a drawing of the specimen.

- 3947. Gonodontis obfirmaria Hübner. South East Passage, Hx. Co.; June 8, 1912. (Perrin).
- 3956. Euchlæna obtusaria Hübner. Deerfield, Yar. Co.; July 8, 1913. (Allen).
- 3960. E. johnsonaria Fitch. Deerfield, Yar. Co.; July 6, 1913. (Allen).
- 4028a. Abbotana clemataria transducens Walker. Dartmouth, Hx. Co.; June, 1907. (Perrin).

#### Family EPIPLEMIDA.

4043. Callizzia amorata Packard. Digby; July 16, 1908. (John Bussell).

### Superfamily TINEOIDEA.

Family PYRALIDE.

#### Subfamliy Pyraustines.

- 4410. Phlyctænia terrealis Treitschke. MacNab's Is.; July 16, 1912.
- 4451. Pyrausta rubricalis Hübner. MacNab's Is.; June 10, 1910.

#### Subfamily Scopariine.

4510. Scoparia centuriella Denis & Schiffermüller. Digby; June 23, 1908 (Russell). MacNab's Is.; July 8, 1911 (Perrin).

#### Subfamily Pyralina.

4511. Aglossa cuprealis Hübner. MacNab's Is.; June 20, 1911.

#### Subfamily Schoenobines.

4547. Schænobias forficellus Thunberg. MacNab's Is.; July 14, 1911.

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#### Subfamily Crambine.

- 4560. Crambus hamellus Thunberg. Yarmouth. (Allen).
- 4566. C. unistriatellus Packard. Yarmouth, July 30, 1912. (Allen).
- 4574. C. alboclavellus Zeller. Yarmouth. (Allen).
- 4579. C. hortuellus Hübner. Yarmouth. (Allen).
- 4580. C. perlellus Scopoli. Yarmouth; August 14, 1911. (Allen).
- 4583. C. myellus Hübner. Yarmouth. (Allen).
- 4585. C. vulgivagellus Clemens. MacNab's Is.; Aug. 10, 1909.
- 4587. C. ruricolellus Zeller. Yarmouth. (Allen).

#### Subfamily Phyciting.

4874. Ephestia kuehniella Zeller. MacNab's Is.; Jan. 8, 1915. This pest has only lately been imported into the Island in one of the cereals for family use (Perrin).

#### Family PTEROPHORIDÆ.

4981. Pterophorus monodactylus Linn. MacNab's Is. (Perrin). Yarmouth, Sept. 20, 1913 (Allen).

#### Family Torrricing.

# Subfamily Olethreutinæ.

- 5031. Olethreutes nimbatana Clemens. Bridgetown; Aug. 9, 1912. (Sanders).
- 5142. Eucosma otiosana Clemens. Bridgetown; Aug. 8, 1912. (Sanders).
- 5143. E. similana Hübner. Bridgetown; Sept. 2, 1912. (Sanders).
- 5237. Tmetocera ocellana Schiffermüller. Bridgetown; Aug. 13, 1913. (Sanders).

#### Subfamily Tortricing.

- 5335. Cenopis reticulatana Clemens. Bridgetown; Aug. 16, 1912. (Sanders).
- 5382. Platynota flavedana Clemens. MacNab's Is.; July 7, 1911.
- 5391. Pandemis limitata Robinson. Bridgetown; Aug. 15, 1912. (Sanders).
- 5406. Tortrix fumiferana Clemens. MacNab's Is.; July 7, 1911; at light.

#### Family (Ecopeorides.

5894. Simioscopsis allenella Walsingham. MacNab's Is.; July. 19, 1911.

Additional notes on species previously reported.

#### Family Nocture.

- 975. Apatela dactylina Grote. MacNab's Is.; June 26, 1908.
- 1053. Harrisimemna trisignata Walk. One specimen, Mac-Nab's Is.; July 9. 1912.
- 1067. Chytonix palliatricula Guenée. Reported by J. Russell as very common at Digby; but only one specimen has been taken at MacNab's Is., July 11, 1911, in sixteen years of collecting.

#### Family GEOMETRIDÆ.

- 3331. Venusia comptaria Walk. Only four specimens of this pretty little moth were taken by J. Russell at Digby, the last being captured on July 20, 1908. Four years later one specimen was collected at MacNab's Is.; July 18, 1912.
- 3370. Percnoptilota fluviata Hübn. Several forms were taken at light on MacNab's Is., in July, 1912.

- 56 ADDITIONS TO CATALOGUE OF BUTTERFLIES, ETC.—rearin.
- by us has been redetermined Larentia [Hydrio-mena] basaliata Walk., by Mr. A. F. Winn of Montreal from a specimen taken by me at Mac-Nab's Is., August 14, 1914. Mr. Winn says that H. taniata is European, and has not as yet been taken on this side. Dyer considered H. basaliata Walk., as a synonymn of H. taniata Stephens. It is merely a question as to the two forms being distinct.
- 3909. Therina athasiaria Walk. MacNab's Is.; May 26. 1910.

#### Family Sesuna.

4191. Bembecia marginata Harris. This species has also been taken at Yarmouth by Mr. E. C. Allen, August 29, 1912.