

# TRANSACTIONS

OF THE

## Nova Scotian Institute of Natural Science.

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ART. I. REVIEW OF NOVA SCOTIAN DIURNAL LEPIDOPTERA.  
BY J. MATTHEW JONES, ESQ., F. L. S.

### PART II.

IN presenting this concluding part of my paper upon the diurnal lepidoptera of Nova Scotia, I have to remark in the first place the typographical errors that unfortunately occurred in several parts of the previous one published in the transactions of the past year. Owing to my absence in the Bermudas during the time when it passed through the press I had no opportunity of correcting the proofs; hence the unavoidable mistakes.

*Debis Portlandia*, (Fabr.)

*Satyrus Portlandia*, (Bois.)

*Hipparchia andromacha*, (Hubn.)

Of this rare species Mr. Belt secured two specimens near Elmsdale. It appears to be a southern form, but strange to say while authors declare it to be rare in the middle States of America, and in Upper Canada, D'Urban states it to be abundant north of the Ottawa, in the valley of the Rouge; and here we have it also in a latitude about as far north.

*Erebia nephele*, (Kirby.)

This butterfly quite unknown near Halifax, is very abundant about Annapolis, in the western part of the province, where in the latter part of July I found it on the flowers of the common thistle (*Cirsium lanceolatum*, Scop.) This genus of Dalman before

included in that of *Hipparchia* is northern in its range, the several species known on the North American continent reaching a very high latitude even to the arctic coast.

*Satyrus alope*, (Fabr.)

*Hipparchia alope*, (Boisd.)

I found this species frequenting the thistle flowers near Annapolis in company with the former species. It was quite as common, if not more so than that species. Mr. Scudder of the Boston Natural History Society, has published a short paper upon the various plants on which the larvæ of the diurnal lepidoptera feed, in which this and *Erebia nephele* are put down as grass and sedge feeders. The sedge and rank grasses being very abundant in the marshy tract east of Annapolis, may therefore account for my finding the species so common there.

*Neonympha Boisduvalii*.

This is the most recent addition to my collection. It was taken by Mr. John Winton at Lower Stewiacke, Colchester Co.

*Thecla nipha*, (Hubn.)

Mr. Belt states that this species is not uncommon in dry, sheltered places in May. I have not been fortunate enough to take a specimen as yet. It appears to be a southern form being found more abundantly in Georgia and Florida.

*Thecla augustus*, (Kirby.)

*T. augustinus*, (West.)

I insert this species also on the authority of Mr. Belt, who says it is common on dry shrubby banks, and when pursued falls among the herbage. I have more than once endeavoured to capture a species of *Thecla* which frequents the bushy slopes near the shore at Point Pleasant, but from its extreme shyness I have never yet succeeded. It is probably, from appearance, either this or the previous species.

*Argus pseudargiolus*, (Boisd.)

*Polyommatus pseudargiolus*,

*Lycæna pseudargiolus*.

Mr. Belt includes this species in his list, stating that it is

common in May and June, and that a second brood appears in July and August. It is one of the small blue butterflies.

*Polyommatus lucia*, (Kirby.)

This is a rather common species about Halifax, making its appearance about the first or second week in May. It is very similar in size and markings to the previous species, but the dark border on the fore wings of the female of *pseudargiolus* is not so wide.

*Polyommatus Americana*, (D'Urban.)

*Lycæna Americana*, (Harris.)

Harris I believe first drew attention to the difference of markings between this and the small copper butterfly of Europe, Asia, and Africa, (*Lycæna phleas*, Fabr.) and raised it to rank as a distinct species. The markings are very dissimilar when carefully viewed, although it would be hard to say that this species had not originated in the foreign form or *vice versa*. It differs more particularly from the European species in being of less size and having the black spots on the fore wings much larger and well defined.

Harris (Insects injurious to vegetation, 2nd edit. p. 274) states that the wings of this species are not notched or tailed. In my Nova Scotian examples they are clearly so, having an indentation at the extremity of the hind wings, one of the points of which is an immature tail.

It loves to keep on the sides of roadways, where it alternately rests upon the little flowers and the hot ground, opening and shutting its wings as if in full enjoyment of its short life. Should another of its fellows venture to approach too near its favourite haunt, or indeed one of the larger butterflies, it immediately flies at the intruder, and a regular battle ensues in mid-air, our little friend generally coming off conqueror. It does not appear very early in summer, but may be seen about as late as September on clover and other blossoms of the field. The caterpillar of this species feeds upon the common dock.

*Polyommatus porsenna*, (Scudder.)

This species of which I have only seen one specimen is very

rare, at least about Halifax, and Mr. Belt found it equally so about Waverley and Portobello on the Dartmouth side. It is a southern species. The caterpillar feeds upon the hawthorn (*Cratægus*.)

Fam. HESPERIDÆ.

*Nisoniades brizo*, (Boisd.)

*Thanaos brizo*, (Har.)

This is a common species about Halifax, to be found on open barrens as well as shady spots in the forest. I have observed it to be numerous in barren places on the blossoms of the blueberry about the end of June. Morris in his N. American Lepidoptera sets it down as an inhabitant of the Southern States, but it is clearly as abundant in our northern latitude as anywhere else.

*Hesperia hobomok*, (Har.)

Common in old roadways in the forest during the summer months.

*Hesperia mystic*, (Edw.)

Not quite so common as the preceding species in similar situations.

*Hesperia Peckii*, (Kirby.)

Rather less numerous than the other species.

Three other species in my cabinet yet undetermined.

ART II. NOTE ON A SMALL AND REMARKABLE LOPHIROID RECENTLY TAKEN OFF HALIFAX HARBOR. BY J. M. JONES, ESQ., F. L. S.

(Read Nov. 13, 1871.)

A FEW weeks ago Dr. Honeyman kindly drew my attention to a singular looking little fish which had been taken at the mouth of Halifax Harbour by a fisherman, and placed in the Museum. At first sight it appeared to me to belong to the *Triglas* or Gurnards from the appearance of the pectorals, which are so particularly developed, but on looking for the three detached rays at the base