

Dr. Bethune then read "A List of the Butterflies of the Eastern Provinces of Canada," which contained no less than 116 species, of which the localities and in most cases the food plants and times of flight were given. The paper was commented on by Capt. Geddes, Messrs. Fletcher, Fyles and Lyman, who contributed much interesting information regarding a number of the species.

Mr. Fletcher exhibited specimens and gave an account of the remarkable habits of the moth *Exyra Rolandiana*, the larva of which feeds upon the leaves of the pitcher plant, *Sarracenia purpurea*. He also exhibited an interesting collection of butterflies sent by Mr. Green, of British Columbia, and gave an account of a visit he made to Sudbury in May last, when, notwithstanding a snow storm that prevailed, he procured the larva of *Pamphila metacomet*, which fed on carex, and which he succeeded in rearing. He made some interesting remarks upon *Colias elis*, *nastes* and *interior*, and gave an account of a rearing of *Colias eurytheme*, the eggs of which he had obtained at Nepigon in June. When the chrysalids were beginning to show the color of the butterfly he retarded their development for some weeks by placing them in a refrigerator, while emergence was hastened by exposure to electric light. He also showed some specimens of *Papilio Bairdii* and *P. Oregonia* received from Mr. Edwards, who had this year added yet another to his laurels by proving that these very dissimilar butterflies were really dimorphic forms of one species. Mr. Edwards had gone to Colorado and with great care had bred broods of larvæ from eggs laid by both forms and had obtained from each brood some of both kinds of the butterflies named. This, the speaker said, he considered one of the greatest triumphs of this wonderful man. He had had the great pleasure of meeting Mr. Edwards in his own beautiful home amongst the mountains of West Virginia, where he hoped he would long be spared to carry on his useful studies with his characteristic energy, perseverance and accuracy.

Mr. Fletcher next exhibited specimens of *Pamphila metacomet* in all stages, egg, larva, pupa and cocoon and perfect butterfly, as well as an egg parasite, which had been named by Mr. Ashmead *Telenomus pamphilæ*, n.s. It was agreed at the last annual meeting that each member should try to work out the life history of at least one insect in time for this meeting: he had devoted his attention to *P. metacomet*, which is as a rule rarely taken at Ottawa. This fact, however, he thinks has been due to a want of knowledge as to its habits. He had previously taken the butterfly only in open glades in a wood, but the larvæ feed on carices growing on exposed rocks. The food plant of this species as well as that of *P. mystic*, which he had also bred this year, was, he thought, not grasses, but sedges (carex), although in confinement they would eat grasses. The eggs are laid in July and the caterpillar passes two or sometimes three moults the same autumn and then hibernates in a case made by spinning three or four of the leaves of the food plant together. The larva is pale green, closely lined all over with broken white lines and covered with minute black piliferous tubercles. The most remarkable part of the larva is the head which is ornamented differently from that of any other species of the genus he was acquainted with. On the front, at the apex, is a large, velvety black area edged with white, and down either side of the face run two white lines with a dark area between them; behind these lines the head is black. The thoracic shield is ribbon-like, double, white in front, black behind. Just previous to pupation two large, white patches were plainly visible through the skin beneath segments 11 and 12. When ready to pupate the larva spins a close cocoon, similar to that of *Acronycta obliqua*, the end of which is stopped up with a silvery white, flakey powder which is emitted through the skin (apparently) from the two white patches mentioned. In three or four instances the pupa worked its way out of the cocoons and fell to the ground. It is piceous, when cleaned of the white silvery powder, slender and much elongated. The tongue case protrudes beyond the wing cases as in *Pamphila ceres*, etc. The abdomen beneath is closely covered with tawny bristles which are thickest at the cremastral end. The end of the body is furnished with about six short blunt spikes and on each side two larger ones. A more detailed account of the stages will appear later in the *Canadian Entomologist*.

The Rev. T. W. Fyles read a short paper on "*Catagasta aceriella*-*Semasia signatana*." In answer to an enquiry whether *Nematus Erichsoni*, the Larch saw-fly, was

still at work, he greatly reduced some cases particularly young trees—the first arrival to more palatable he once thought numbers of small appearance. He believed the state He had been seen of small tamaracs to be seen. Mr. growing up.

Mr. Fyles He said that in *colletis* larva he hoped to return of obtaining that he examined that he had tied a feeding upon tenths of an inch body, lead cold him, but he let and veins. In *farinolis*, Lin.

Mr. Fyles page 41 of the *Anisota virgin*

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Mr. Lym among which these had been Bethune, that *Canadian En*

Mr. Flet identification of *Thymelicus Thecla Acadic* fulvous spots This form was years.

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