

## SPECIAL MEETINGS.

Article 8.—Special meetings of the Society may be held at any time or at any place, the time and the place being approved of and decided upon by the members present at the time of the regular annual meeting. At neither any ordinary or special meeting may business of the Society be transacted relative to the altering of any of these by-laws or opposing the general tenor of the same.

## BRANCHES.

Article 9.—Branches of the Society may be formed in any place within the Province of British Columbia on written application to the Executive from at least six persons resident in the locality.

Article 10.—Each branch shall be required to pay to the parent branch \$1 per annum for each paying member on its list, and shall be governed by the constitution of the parent Societies, but shall have power to elect its own officers and form its own by-laws.

## OFFICERS.

Article 11.—The officers of the Society shall consist of a President, two Vice-Presidents, a Secretary-Treasurer, an Assistant Secretary, and with these not fewer than three and not more than five members to act as an Advisory Board.

## ALTERATIONS.

Article 12.—These by-laws may be altered or amended only at the regular annual meeting of the Society by the approving vote of three-fourths of the members. Such alterations must be made by notice of motion, which shall have been sent to the Secretary, and a copy of such be in the hands of the members at least one month previous to the annual meeting. Written votes by members upon subjects about which one month's notice has been given may be accepted by the Society at the annual meeting in lieu of presence.

The President: The next item on the programme will be the presentation of reports from the various districts.

## REPORT FROM THE VICTORIA DISTRICT: INSECT NOTES OF THE YEAR.

By E. H. BLACKMORE, VICTORIA.

I notice that the yearly reports from the different districts generally relate to the year's economic conditions, but, as I am a systematic and not an economic entomologist, my report will have to be along the lines of the systematic collector, and as there are some of these gentlemen present this morning, I hope it will not be without some interest. I would like to mention here that during the past season my occupation has taken up the whole of my evenings, leaving me the days free, so that most of my observations and captures have been amongst the Diurnals and day-flying moths.

There were fewer insects on the wing than usual this season, some of our commonest butterflies being very scarce, especially the first broods of *P. rapæ* (the common white), *C. ampelos* (the ringless ringlet), and *E. helloides* (the purplish copper). *Papilio rutulus* (the common tiger-swallowtail) and *P. eurymedon* were fairly common at Goldstream in mid-June, although *P. zolicaon* was very scarce. This is never a common species by any means; in fact, I only observed two specimens the whole season. *Argynnis bremnerii* (Bremner's silver-spotted fritillary) and *A. rhodope* were not so plentiful as in former years, but, on the other hand, *Brenthis epithore* was fairly common. *Eurymus occidentalis* (the yellow sulphur) was to be obtained in early June, but mostly only males, the females being very scarce, which may account for the species not being very plentiful at any time. Its orange congener (*E. eurhytheme*) was again absent, and I have not seen a specimen for two

years. There is another butterfly which seems to have disappeared, and that is the pine white (*Neophasia menapia*). I made a special trip after it at Goldstream the first week in September, but did not see a single specimen. I captured three in September, 1911, but have not seen one since. *Eugonia californica* (the California tortoiseshell) was scarce, and I did not see a red admiral (*Vanessa atalanta*) during the whole season, although I kept a sharp look-out for it, as I have only taken two specimens during the last three years. *Vanessa cardui* (the painted-lady) and *V. caryæ* I have not seen at all during the same length of time, although *cardui* is supposed to be fairly common.

There is still another butterfly which I have been trying hard to get, and that is *Oeneis nevadensis*, Feld (better known as *gigas*, Butler). It generally appears about June 10th, but owing to the wet weather which occurred at that time, I did not see a single specimen.

Coming to the family of the Lycaenidae (the hairstreaks, blues, and coppers), I found *Uranotes melinus* (the common hairstreak) and *Thecla californica* much scarcer than usual, the first brood of the first named being exceedingly so. On April 18th I took eight *Incisalia mossi*, six males and two females. The next three days it rained, and I went again on the fourth day, but did not see any flying about. As I wanted to get a few more, I made a careful search of the bracken over which they play, and found one male, but after that date I did not see it again.

Behr's eyed blue and *Cyaniris ladon* var. *nigrescens* were the first blues out, appearing towards the end of April, and they were fairly plentiful, but *Everes amyntula* (the Western tailed blue), which came out two weeks later, was very much scarcer, and *Cupido saxipolus*, which did not put in an appearance until June 2nd, this year was scarcer still. The weather, which was very wet about this time, seemed to kill them off in a few days. The skippers apparently were made of sterner stuff, and they seemed to stand the vicissitudes of the weather better, as *Thanaos propertius* was very common in the spring and *Thorybes pylades* (the Northern dusky-wing) was more plentiful than it usually is, but unfortunately after the first few days they were entirely unfit for the cabinet. I am glad to be able to record the capture of one each of *Thecla blenina* (Hewitson's hairstreak) and *Erynnis comma* var. *nevada*, which two species are rather rare in this district, especially the first named.

Turning to the Nocturnals, I found *Smerinthus ophthalmicus* fairly plentiful from May 13th to 26th, hanging to the cables between the arc lights and the electric-light poles. On the first morning that I went around, in company with the lamp-trimmer, I obtained nine specimens of *S. ophthalmicus* on one cable; on another I found five, four males and one female, evidently a case of double attraction, that of light and that of sex. In the same way I captured *Sphinx vancouverensis*, *Deilephila gallii*, *Samia columbia*, and several other good things, only in much smaller numbers. *Diacrisia virginica* (the Virginian tiger-moth) was extremely abundant from the end of April until the end of June, and I took one in perfectly fresh condition as late as August 8th.

As I was unable to do any sugaring, I do not know what results were obtained along that line of attraction, but "sallowing" was very late this season. Owing to the cold wet spring the willows were very late in blooming, and when they did bloom the weather continued so bad that a start could not be made until the bloom was nearly over. At the kind invitation of an entomological friend, I went to Quamichan Lake in April for a couple of nights "sallowing." During the afternoon it had rained very heavily and the evening was a little chilly, so that our expectations were not very great. However, the "catch" turned out much better than was expected, and from six trees visited that night we gathered eighty-six specimens, representing twenty different species, amongst which were *Graphiphora ferrigera*, *Xylina ferrealis*, *X. torrida*, *X. holocinerea*, *Calocampa nupera*, and *Euharveya carbonaria* var. *dices*.

The Geometridæ with a few exceptions were rather scarce during the past season; out of a total of seventy-two different species taken from March to November, there were no less than forty-four species of which I only obtained from one to three specimens of each kind. The exceptions were the genus *Hydriomena* and its allies, the *Petrophoras* and the *Cleora* group. I am pleased to record the taking of two specimens of that rather rare Geometer *Zenophelps victoria*, which was described by the late Rev. G. W. Taylor from two specimens taken in this city. I took them both in August, one on the 14th and the other on the 20th.

I collected quite a number of Coleoptera during the season, which included several very interesting forms that as yet I have not had time to determine. I was fortunate in capturing three specimens of that very rare beetle *Zacotus matthewsii* in the garden attached to my house. I obtained two in July and one in August. I was on the look-out for tiger-beetles in the spring and early summer, but did not see any until the first week in September, when I took several specimens of *Cicindela oregona* at Goldstream. Appended is a list of the rarer moths captured during 1913 and not included in the foregoing remarks. The numbers in front of each species correspond to those in Dyar's List.

## YEAR 1913.

788.	<i>Scepsia packardii</i> .....	July 22nd.
848.	<i>Leptaretia californicæ</i> .....	April 27th.
848b.	<i>Leptaretia californicæ</i> var. <i>dimidata</i> .....	April 29th.
864.	<i>Diacrisia rubra</i> .....	May 1st.
873.	<i>Platyprepia virginalis</i> .....	July 8th.
952.	<i>Alypia langtonii</i> .....	June 3rd.
1219.	<i>Hadena suffusca</i> .....	June 14th.
1487.	<i>Noctua rosaria</i> .....	May 26th.
1494.	<i>Noctua inopinatus</i> .....	July 30th.
1496.	<i>Noctua clandestina</i> .....	Sept. 17th.
1851.	<i>Mamestra similis</i> .....	July 30th.
1901.	<i>Xylina cognata</i> .....	March 28th.
1951.	<i>Nephelodes pectinatus</i> .....	Aug. 14th.
2222A.	<i>Orthosia ferruginoides</i> .....	Sept. 20th.
2482.	<i>Autographa mappa</i> .....	July 16th.
2514.	<i>Autographa celsa</i> .....	Sept. 7th.
2524.	<i>Autographa corrusca</i> .....	July 30th.
3081A.	<i>Hypena decorata</i> .....	Oct. 2nd.
3151.	<i>Schizura unicornis</i> .....	June 11th.
3253.	<i>Philopsia nivigerata</i> .....	May 4th.
3294.	<i>Eupethecia coagulata</i> .....	May 9th.
	<i>Eupethecia columbiata</i> .....	July 16th.
3337.	<i>Epirrata dilutata</i> .....	Oct. 20th.
3353.	<i>Perstroma nubilata</i> .....	June 19th.
3357.	<i>Neolexia xylina</i> .....	Aug. 27th.
	<i>Mesoleuca occidentata</i> , Taylor .....	July 23rd.
	<i>Mesoleuca occidentata</i> var. <i>mutata</i> , Taylor .....	July 20th.
	<i>Mesoleuca decorata</i> , Taylor .....	July 20th.
3456A.	<i>Petrophora munitata</i> var. <i>labradorensis</i> , Pack. ..	June 11th.
3550.	<i>Eois sideraria</i> .....	June 18th.
3656.	<i>Sciagrapha neptaria</i> .....	May 7th.
3776.	<i>Enypia venata</i> .....	July 24th.
	<i>Enypia packardata</i> , Taylor .....	July 31st.
3902.	<i>Sicya macularia</i> .....	Aug. 20th.
3976.	<i>Synaxis pallulata</i> .....	Sept. 6th.
3784.	<i>Alcis sulphuraria</i> .....	July 13th.

4037. <i>Brephos infans</i> .....	April 15th.
4043. <i>Callizzia amorata</i> .....	Aug. 8th.
The following Geometers are new to the British Columbia List:—	
<i>Eupethecia mutata</i> , Pearsall .....	July 18th.
<i>Dysstroma citrata</i> var. <i>suspectata</i> .....	Aug. 12th.
<i>Dysstroma citrata</i> var. <i>punctum notata</i> .....	Aug. 20th.
<i>Hydriomena autumnalis</i> var. <i>crockeri</i> , Swett .....	May 4th.
<i>Hydriomena speciosata</i> var. <i>taylori</i> , Swett .....	July 3rd.
<i>Hydriomena edenata</i> , Swett .....	April 5th.
<i>Hydriomena irata</i> , Swett .....	May 7th.
<i>Petrophora defensaria</i> var. <i>amorata</i> .....	Sept. 24th.

### REPORT FROM THE OKANAGAN DISTRICT: INSECT PESTS OF THE YEAR IN THE OKANAGAN.

By W. H. BRITAIN, PROVINCIAL ENTOMOLOGIST FOR NOVA SCOTIA (FORMERLY OF BRITISH COLUMBIA).

The summer of 1913 was not marked by any insect outbreaks of unusual severity. Most of the usual pests were present in greater or less numbers, while several interesting records were made for the first time. The following are some of the most important pests to receive attention during the year:—

#### BUD-WORM (*Tmetocera ocellana*).

This insect was found working in several orchards in the Kelowna District, though not in sufficient numbers to do a great deal of damage. Three distinct species of moths were reared from larvæ resembling those of the true bud-moth (*Tmetocera ocellana*). This is interesting in view of the fact that the twig-boring habits of the bud-moth, which have been repeatedly observed in British Columbia, do not appear to have been noted elsewhere. It is possible that one of these other species is responsible for this work.

#### THE ANTIQUE TUSsock-MOTH (*Orgyia antiqua*).

The larvæ of this insect were unusually numerous in the orchards this season, but it is of only minor importance as a fruit pest.

#### CLIMBING CUTWORMS (Noctuidæ).

These insects, of which we had nearly a plague last year, could hardly be found at all this season. As we had no facilities for rearing these insects last season and they occurred in such small numbers in the spring of the present year, we do not know of what particular species they belonged.

#### TENT-CATERpillARS (*Malacosoma* spp.).

These insects appeared in large numbers in the spring, but were practically wiped out before reaching maturity by their parasites and by a bacterial disease with which they were attacked. From the large number of larvæ we collected for rearing no adult moths emerged.

#### CODLING-MOTH (*Cydia pomonella*).

There was no further outbreak of this insect in the Armstrong District this year, the measures taken for its eradication having apparently proved successful. An outbreak occurred at Kelowna, however, though not in the same orchards as last year.

#### LESSER APPLE-WORM (*Enarmonia prunivora*).

This insect was unusually abundant throughout the orchards of the Okanagan this season, and many specimens reached the office from the different districts. From the letters that we have received, it would seem that this insect is on the increase. From its general resemblance in habits, life-history, and appearance to the codling-moth, it is frequently mistaken for this more serious pest.