

PAPILIO.

Organ of the New York Entomological Club.

Vol. 1.]

September, 1881.

[No. 8.

REPORT OF THE PROCEEDINGS WITH REFERENCE TO "LEPIDOPTERA," OF THE ENTOMOLOGICAL SECTION OF THE AMERICAN ASSOCIATION FOR ADVANCEMENT OF SCIENCE.

The Entomological Sub-section of the American Association met at Cincinnati, on 18th, 19th and 20th of August, 1881. There were present Rev'd Dr. Jno. G. Morris, Chairman; B. P. Mann, Secretary; Prof. A. J. Cook, Prof. S. H. Peabody, Dr. H. S. Jewett, Chas. Dury, C. G. Siewers, V. T. Chambers, W. H. Edwards, Prof. J. A. Lintner, Prof. Cyrus Thomas, J. Duncan Putnam, Prof. C. V. Riley and others.

The first paper on Thursday, 18th, was read by Mr. Edwards, giving an account of the peculiar habit of *Heliconia Charitonia*, Linn, as observed and communicated by Dr. Wm. Wittfield, of Indian River, Fla. In two instances a group of the butterflies of this species, three or four in number, were found clinging by their legs firmly to a chrysalis of the same species, and they remained there, resisting attempts to frighten them away, for two days or more, until the imago issued from the chrysalis, when the butterflies departed.

This relation elicited much interest and was discussed by several of the members. Some thought the gathering of the butterflies might be caused by sexual desire, the imago being perhaps of the opposite sex from the butterflies. Others thought that the butterflies, knowing well their own immunity from attacks of birds or animals, by reason of obnoxious fluids or smell, had come to discover that their presence protected from attack the naked and defenceless chrysalis, at a time when protection was most needed, namely, just before the issuing of the imago.

The other papers read related to other branches of Entomology than the Lepidoptera, and therefore are not reported for PAPILIO.

Mr. Edwards exhibited a box of butterflies, embracing *Limnitis Arthemis*, called by Mr. Scudder in his recent book, "Butterflies" 1881, the White-banded Purple, and *L. Ursula*, called the Red-spotted Purple, and requested an opinion from the members as to the color of these insects. The group is called "Purples" by Mr. Scudder. The members were unanimous that the specimens were black or brown-black, and not purple. One gentleman thought he discovered a purple flush to *Arthemis* when looked at sidewise, but was of the same opinion as the rest as to the ground color. It was agreed that the name was a misnomer.

On Friday, Mr. Edwards read a paper on the Length of Life of Butterflies, showing from his own notes made during a period of 15 years, last past, that with the summer butterflies the duration of life was measured by weeks, depending on the period when copulation took place in the male and oviposition in the female, shortly after which events the sexes expired. A butterfly three weeks old was aged, and if any lived longer they were the males who had been unable to find mates. As to the hibernating butterflies, the history of *Danaus Archippus* was related in full from special observations made, and it was shown that the duration of life could at most be from September to about first of June of the following year, and that the first eggs of the year were laid by the hibernating females, who at once disappeared after finishing their laying. That the broods of this species followed in quick succession to the number of three or four at least, and that the eggs were laid by young females, but a short time from chrysalis. This was directly opposed to the statements of Mr. Scudder, first set forth in *Psyche* in 1875, and recently in "Butterflies," 1881, that *Archippus* lived from 12 to 15 months; laid no eggs till after hibernation, and then laid all along through the summer, so that the caterpillars formed during the summer were from these eggs only. In fact that this species had changed its habits from that of its kind, and bred much after the fashion of a mammal.

After this paper Prof. Lintner read one on the Life Duration of the Heterocera, in which he gave the result of his own experience—15 days to 3 weeks as the limit of life of the imago. Mr. Lintner suggested that good service might be rendered science by the collation of published records, and the publication of data respecting appearance of species of insects.

This paper was followed by a discussion of the whole subject by members. Dr. Jewett was emphatic as to there being at least three broods of *Archippus* in Ohio, and he had repeatedly

observed that the eggs were laid by females evidently not long from chrysalis.

Prof. Riley related his experience in Missouri and other States. He agreed with Mr. Edwards on the facts in the history of *Archippus*, but also believed that the species did not hibernate at all in the Northern States, but migrated as far to the South as Missouri, or Virginia, returning again in the Spring to the North more or less; and he suggested that this fact might have led Mr. Scudder into such errors as he has published about this species.

In the afternoon session Prof. Lintner read a paper on A Remarkable Invasion of Northern New York by a Pyralid Insect: relating that during May, 1881, St. Lawrence Co., N. Y., was much overrun by a new sort of army worm, causing vast destruction and threatening much more, when they disappeared by going to ground. By obtaining cocoons he ascertained when the moths came out that they were the little species *Crambus Vulgivagellus*, one which had never before been known to be an injurious insect.

Mr. Edwards read a paper on The Alleged Abnormal Peculiarity in the History of *Argynnis Myrina*: showing from careful observation that the history of both *Arg. Myrina* and *Bellona*, as related by Mr. Scudder in the Am. Nat., 1872, and repeated in "Butterflies" is wholly incorrect, and that these species are not at all peculiar, but like other two or three-brooded species in their behavior.

On Saturday, 20th, the papers read were upon other insects than Lepidoptera. In the informal discussion that closed the meeting Prof. Peabody related some observations that led him to believe the life period of certain Heterocera to be very short—scarcely reaching a week.

Mr. Edwards mentioned that *Thecla Henrici* laid its eggs in the wild plum, placing them at the base of the plum stalks, on upper side. That the caterpillars on emerging from the eggs travelled up the stalks and fixed themselves on the young plums, eating out a round cavity the diameter and depth of the head at first, and continuing to feed upon the inner part of the plum, avoiding the seed, growing as the plum grows. They spend most of the time with head and next two segments in the plum, coming out to moult, and changing to another plum when the first one is completely excavated. They hibernate in chrysalis, and the butterfly comes forth in the Spring when the plum trees are beginning to bloom, being a one-brooded species.

The meeting adjourned Saturday noon to meet in 1882 at Montreal.



1881. "Report of the proceedings with reference to "Lepidoptera", of the Entomological Section of the American Association for Advancement of Science." *Papilio* 1(8), 123–125.

View This Item Online: <https://www.biodiversitylibrary.org/item/39681>

Permalink: <https://www.biodiversitylibrary.org/partpdf/314705>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Smithsonian

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.