

mountains north, a district burned a few years ago, and will, no doubt become more frequent there in future years, as its food plant is abundant. At the summit, this butterfly and most others were well nigh exterminated in the summer of 1886 by the storm of fire which raged through the pass, sparing nothing but the little marshes and their inhabitants. Collecting there several times in 1888 and 1889, I saw scarcely a butterfly other than the two species of *Chrysophanus*, which live at the edges of the little swamps. These were as frequent at the summit as I found them in their resorts elsewhere. The larger butterflies, however, were lacking or were excessively rare, excepting only *Pieris occidentalis*, which seemed to have in some degree regained a footing.

The ♂ of *Elis* flies chiefly from about the 28th of June to the end of July. My initial date in 1886—an early season—was June 23. After July few ♂s are seen, and those few not newly out of chrysalis. The ♀s are abroad during a period about equal to that of the ♂s, but beginning and ending a few days later; my collection dates indicate a term of about five weeks, say from July 6th to August 10th or 12th. The ♂ is most frequent near the middle of July, and the ♀ a week or ten days later. The total period of the imago, including both sexes, varies in different seasons from a term of thirty-five to one of forty-five days: during the last five to ten days there are seen none in good condition—the females appear in faded finery, and rarely a tattered male lingers among the asters. There is but one flight in a summer. No indication of hybernation in imago or pupa has come to my notice. All the evidence so far obtained tends to show that the larva invariably hibernates at a very early stage, almost certainly at first stage, and that the species, in its habit of development, is a strict biennial.

Admitting *Elis* to be a distinct species, it is without doubt extremely near to *Meadii*, far closer than to any other well known form; this the ♂ especially proves. Probably its description as a distinct species was immediately due to the incident of failure to collect ♂s in the first instance.

DEFINITE CHARACTERS OF THE ♂.—Material examined, twenty-nine caught specimens. The smallest measures 48 mm., or 1.9 inch; the largest is 57 mm., equal to 2.24 inches. These measures are obtained by adding the length of the two primaries (measuring from apex to centre of base of wing) and the breadth of the body. Average expanse of the twenty-nine individuals 51.2 mm., or 2.01 inches. This is a larger butterfly than *Meadii* or *Hecla*. It is smaller than *Christina*, or even *Alex-*