

lectors, who possess really good representative collections, and fine examples are to be seen in the National Museum of the Geological and Natural History Survey of Canada, at Ottawa.

The variations in the appearance of the live females in the Coliadæ are most puzzling, and were it not for the similarity in the flight of several distinct forms of the same species, I fully believe the nomenclature of this genus would be even larger to-day than it already is. I beg to call your attention, as an example, to *Colias Christina*, Edw.

The variations in size, in colour, and in the markings generally, are so great, that had not several of the numerous forms been actually taken *in coitu*, it would be hard to make a collector believe that they were one and the same species.

The females of *Col. Christina*, as far as my experience goes, may be better compared to common "ribbon grass" than any other diurnal I have come across—by which I mean to say, that as it is a difficult matter to find two blades of grass exactly alike, so it is with the females of *Col. Christina*. The shades run from a pale green (the colour of *Actias luna*,) to lemon colour, and from lemon colour to bright orange, and the discal spot on the primaries is almost obsolete in some, whilst in others great uneven blotches of black or dark brown appear. When I captured this species in very large numbers in 1883, whilst collecting for Mr. Henley Grose Smith, of England, I was passing through what is known as the Red Deer River country, about seventy miles from Calgary, in the North West Territories. I was quite under the impression that I had discovered a number of new species, and that I could on my return home include a large proportion of my entomological acquaintances in describing and naming after them these peculiar butterflies. Imagine my surprise, when after referring about twenty-five or thirty of these females to Mr. W. H. Edwards, they all came back labelled *Col. Christina*, ♀.

I now give a list of the different species of *Colias* with which I am tolerably familiar, having captured specimens of each myself:

C. Christina, Edw., including southern form *Astrea*, Edw.

- ♂ quick of flight, like *Eurytheme*, and difficult to capture;
♀ short flights and slow of movement in the air. (Mr. W. H. Edwards has already figured *Col. Christina* in his excellent work on the butterflies of North America, but I have since