

FURTHER NOTES ON ALBERTA LEPIDOPTERA.

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(The numbers refer to my list previously published in this magazine.)

1. *Danaïs archippus*, Fabr.—Both Mr. Willing and Mr. Gregson inform me that there can be no doubt that the species breeds here. It is not likely, however, that it survives the winter in any stage.

[3a. *Argynnis leto*, Behr.—I have had a few specimens sent me as this species from Utah and Idaho. The males differ from eastern *cybele* mainly in being less heavily marked with black, especially in the outer row of round spots in the interspaces, with a distinct tendency towards the gradual obliteration of all markings near the apex, and in having smaller metallic spots beneath. My only female of these is pale straw instead of pale red as in typical *cybele*, and both sexes agree well with Holland's figures. Some Calgary specimens taken since my last list was published closely approximate these, though I cannot see that they are superficially separable from the local *cybele*, as they appear to grade through. My only local female of either, taken in cop. with one of the most intermediate males, is considerably paler in colour than eastern females, but except in being much smaller, otherwise approximate them rather than my Idaho specimens. In short, what I have listed as *cybele* seems strictly referable to neither so-called species.]

4. *A. cypris*, Edw.—The species is, without much doubt, identical with *cypris* ♂ sent me from Denver, Colo., which, however, is somewhat richer in colour. The resemblance of the local form to the paler forms of *lais* is very close, and confusion is easy without a good knowledge of both. Though nearly all Calgary specimens that I have seen are a little larger, a series I took last summer on the Gleichen prairie, as well as some submitted to me by Mr. Crocker from Redvers, Sask., are decidedly smaller than Calgary *lais*. The apices are more acute, and outer margin very slightly concave instead of straight or slightly convex as in *lais*. The veins of primaries are much less prominently black marked. Another difference is in the greater length and thickness in *cypris* of the tuft of hairs on the subcostal vein of secondaries. Also, this tuft, as well as the rest of the hairs near the inner margin, show, in certain lights, a very distinct violaceous reflection, quite characteristic of the species, and not seen in *lais*. These remarks apply to the male. I have only one undoubted female, taken in cop. Other females scarcely differ, but