THE BUTTERFLIES OF LAGGAN, N. W. T.; ACCOUNT OF CERTAIN SPECIES INHABITING THE ROCKY

MOUNTAINS IN LATITUDE 51° 25'.

BY THOMAS E. BEAN, LAGGAN, ALBERTA. (Continued from page 149, Vol. 25.)

ARGYNNIS APHIRAPE, VAR. OSSIANUS, HERBST.

My local material allied to the European Aphirape consists of 22 males, 11 females. These have been studied in comparison with 3 &, 1 & typical Aphirape from Germany, 2 & 2 & Aphirape var. Ossianus from Northern Finland, 1 & Ossianus from Sweden, 1 & 1 & Aphirape var. Triclaris from Labrador, and 3 & 1 & Triclaris collected by Mr. H. K. Morrison in southern Colorado. In the local series the following relationships are displayed:—One male is Triclaris, agreeing closely on upper surface with the Colorado males, but on the under side nearer to the single Labrador male. Five males and four females are Aphirape var. Ossianus. The remaining 16 males and 7 females are of an intergrade type, combining features of Ossianus and Triclaris. On under side these compare closely with my Labrador pair of Triclaris, having the spots of secondaries mainly surfaced in nacre and very conspicuous. On upper side, however, they are distinctively of the Ossianus type.

Triclaris is by some authors considered a distinct species. The examination I have now made results adversely to that view. As above shown, the Laggan material contains over 25 per cent. of examples which are formal Ossianus, with about 75 per cent. of specimens combining the character of Ossianus upper surface with an extreme degree of Triclaris quality below. In order to make a reasonable plea for the distinctness of Triclaris from Aphirape, it would be requisite to prove that Ossianus and Aphirape in the European fauna are mutually independent. For Ossianus certainly is a resident in the bogs of Laggan, and just as surely the Laggan intergrade series identifies Triclaris with Ossianus.

In the Laggan series appears nothing very close to typical Aphirape. In fact, 75 per cent. of the Laggan occurrence is at the farthest point of separation from Aphirape.

Triclaris of Colorado is the North American form nearest to typical Aphirape, which it greatly resembles on upper side, and the Laggan form as markedly resembles Ossianus. It is also worthy of special note that in Triclaris of Colorado, as in typical Aphirape, the colour-pattern is