

able from examples of *Hecla* from the Arctic Sea, except that the *Meadii* males (as well as *Elis*) have the mealy spot on costal margin of hind-wings, which *Hecla* shows nothing of. If a *Hecla* ever appeared with that spot, I should say the two were forms of one species.

I sent a pair of these to London to be submitted to two of the most experienced lepidopterists there, and asked them to tell me in writing what the species was. I gave no information about the pair, except that they were taken somewhere in America. Both the experts replied that the species was *Hecla*, but they noticed the presence of the mealy spot. In the museum collection, all the male *Hecla* were without that spot, and I cannot learn that it is known in any collection.

These pale examples are not worn but are fresh and evidently not long out of pupa. They must be the product of eggs laid by the earlier imagos the same season. Mr. Bruce wrote 7th Sept., 1890, that he had "just been up Gibson Mountain; elevation 14,000 feet; all barren and desolate. All I saw was two *Alexandra* and three *Scudderii*, half a dozen *Meadii*, a dozen *Arg. Eurynome*, and as many *P. Smintheus*. I send two of the *Meadii* to show you the colour." These were the first examples I had seen approaching *Hecla*, and on calling Mr. Bruce's attention to them, he presently took several others of same type about Hall Valley. That the imagos do sometimes come out the same season the eggs are laid, appears from my experience with larvæ at Coalburgh. On 23rd July, 1888, I received larvæ just out of egg from Mr Bruce; these passed the first moult, 27th; one passed the third moult 9th Aug.; the fourth, 14th; pupated, 19th; and the imago came out 25th August. The rest of the larvæ passed the third moult and hibernated. I sent them to Clifton Springs, N.Y.; got the survivors back in April following, and on 21st and 23rd April they passed the fourth moult; on 5th May one pupated, and gave imago 12th May.

In 1889, on 30th August, or five weeks later than in preceding year, I received eggs. Between the 23rd and 30th of September, all the larvæ were in hibernation after only two moults. The same year a second lot of eggs came 1st September. The larva hibernated after second moult.

In 1890 eggs were received 8th August; nearly all the larvæ hibernated after second moult, but a few went to third and one to fourth, but