## THE CANADIAN ENTOMOLOGIST

along the trails, and it was only on the warmer days that they appeared on the snow itself. One of these latter captures, however, presented unmistakable evidence of having recently emerged as it had not yet reached the state when active flight was possible, the wings being soft and not fully developed. It has been suggested that the larvæ of this moth might pupate in the dead, partly rotten wood as *Brephos infans* is supposed to do, and so perhaps lie above the snow line. Breeding experiments have failed, however, to show any indication of this. Moreover, the open woods in which *L. brephoides* breeds were in the above instance practically free from necessary dead material. Perhaps not the least interesting point in this moth's habits is the fact that it emerges when the temperature registers but a few degrees above freezing and while the ground upon which the pupe rest must be very close to the freezing point. The moth, however, is thickly clothed with hairs which doubtless help to protect it from the cold.

## Hemileuca lucina var. latifascia B. and McD.

This moth is by no means uncommon in the sand dunes near Aweme, Man. The handsome black and yellow caterpillars are at first found in bunches feeding upon the low shrubby aspen poplars and later as they attain maturity, scattered singly upon the same type of vegetation. They are often heavily parasitized and, in consequence, the moths only appear in large numbers at intervals of several years. The moth is an unusually handsome one, and its jerky, up and down flight, from whence it gets the name "buck moth," makes it an object of particular interest, flying as it does in broad daylight and during the finer days of autumn. For a long time we found difficulty in securing them. Then in a moment a secret was revealed to us whereby the males were collected with little effort. The moth is, of course, a day flier so that light traps are out of the question; yet, strange as it may seem, fire still provided the attractant, though in a totally different way. The means adopted to obtain the desired end were extremely simple and consisted of lighting a small fire from which sufficient smoke issued to drift "down wind" for about half a mile; in other words, to make a smudge of some dead grass and leaves. Then the collectors would calmly sit near and await the coming of the moths, nor were the latter long in appearing. A moth would be seen dodging backwards and forwards across the smoke as if seeking the strongest part of it, but at the same time steadily moving nearer to its source. Soon it was hovering over the fire and shortly after found a resting place in a convenient cyanide bottle. Others quickly followed, perhaps two or three at once, and the sport became fast and exciting. From what distance these moths came is unknown, but doubtless it was from as far as the smoke remained fresh. A bright, sunny day with a breeze sufficient to keep the smoke low provided the ideal conditions. We noted that these moths came towards the fire without hesitation, and that they invariably flew towards its source as if recognizing at once from whence it came. When actually over the fire they hesitated, hovered over it, and at times flew directly into the flames; on other occasions they recognized the heat sufficiently soon to enable them to "make off" before being injured.

From the fact that only males were enticed it would seem as if the smoke provided some odour or other attracting properties reminding the male of the opposite sex rather than of food. But whether this is so or not cannot

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