

that we have a decrease to the third instar with an average of only 8 days, and an increase to 10.7 in the fourth and to 13.8 in the fifth. I hardly know how to account for this, as the weather was about the same during the entire period of growth of the caterpillars, particularly cloudy, gloomy and cold, conditions which were more or less reflected indoors, for the caterpillars were not kept near any artificial heat. Undoubtedly there must be many days in April and May, and even June, especially in such cold and rainy springs as the past two seasons have been in this vicinity, when the caterpillars in the open would become so chilled as to be unable to move about and feed.

There are some habits of the caterpillars which are worth noting: (1.) In emerging the caterpillar eats an irregular hole in the top of the egg, but only large enough for it to crawl through, the greater portion of the egg being invariably left. (2.) The caterpillars are very active crawlers, a fact which I learned at first to my loss, and this would seem to be necessary in nature to enable them to reach tips of the shoots of the cinquefoil, where the tender opening leaflets are to be found. (3.) Almost always after moulting I would find the caterpillar turned around, head facing its exuvia. This it seldom ate, although the position taken would seem to indicate the opposite. One example which had recently passed the first ecdysis I watched for two hours, but no attempt at eating its exuvia was made. In one instance, however, after the second ecdysis, I caught the caterpillar in the act of feeding on its exuvia. Usually I never had any trouble in finding the latter. (4.) In selecting a place to pupate, the caterpillar most often chose the under surface of the gauze cover on the vial, only occasionally the under surface of a leaflet. In the open the latter is presumably the position most often chosen.

There are two or three very interesting features in the clothing of the caterpillar and chrysalis, a description of which follows, to which I desire to call attention. I would mention, especially, the long, backwardly-curved dorsal bristles of the newly-hatched caterpillar, the numerous egg-shaped processes of the caterpillar in the later instars and the very minute wine-glass-shaped processes of the chrysalis. The significance of these various structures is not readily apparent, but when someone is able to make a careful comparative study of *dorcas* with its congeners, especially *helioides* and *epixanthe*, more light may be thrown upon the subject.

I can heartily recommend *Chrysophanus dorcas* to any one who desires to study the life-history of some Lycænid form. The fact that its eggs can be secured in numbers, with the assurance that a good proportion will