A Method of Collecting Catocala Minuta (Lepidoptera: Noctuidae) and Related Species

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During the last twelve years I have 'sugared' extensively in areas where large honey locusts (Gleditsia triacanthos L.) are abundant. Although the various forms of Catocala innubens Guenee and Strenoloma lunilinea (Grote) have appeared in my bait traps, Catocala minuta Edwards has been absent. [C. minuta is taken on Gleditsia in southern Michigan by using a mixture of molasses, brown sugar, beer and rum--Ed.] There is, however, a method of collecting the pupae of C. minuta that I have employed with excellent results.

Obtain a quantity of clean rags or burlap bags. Clear the bases of the honey locust trees; all climbing vines and nearby weeds should be removed. Moisten the bags and place them around the base of each tree in close proximity to the trunk. The cloth should be folded two or three times or crumpled, as if the surface is too smooth, the larvae will cross over and pupate farther away. Normally, a mature larva would leave the tree and spin a loose cocoon in the leaf litter and debris surrounding the tree, but with the base of each tree surrounded with bags, the larva will have no need to look farther for a suitable place to pupate. It will spin inside or under the bag.

The bags should be positioned about 1 June. In New Jersey, pupae will be obtained from this date to about 1 July. [Adult minuta have been taken as early as 27 June in southern Michigan--Ed.] Larvae will usually die if disturbed when spinning, so it is best to wait until late in June before the bags are searched for pupae. I have collected the pupae of C. minuta, C. innubens and S. lunilinea by this method, as well as other species that have fed on nearby plants. In the season of 1966 I fitted 10 Gleditsia in two locations with burlap bags, and obtained 30 pupae of C. minuta, a species I had sought for many years without luck.

I have not yet tried the method on other species of trees, but it may be generally useful for the Catocala; even the larvac of Apantesis spp. (Lepidoptera: Arctiidae) may be trapped with bags flattened on the ground and weighted. Once I substituted newspapers, usually a successful medium for the pupation of Catocala, but upon later investigation I found the material shredded, perhaps by mice, rats or other mammals. There were no pupae. Under the circumstances, rags or burlap bags would seem to be the safer material.