

As the Rev. Dr. Fyles mentioned in the April popular article, many caterpillars hibernate under pieces of board, flat stones, etc., in fields and open places in woods. Along the grassy sides of railroad tracks there are usually numbers of strips of bark, broken pieces of plank, etc., and if these are examined, many noctuid and arctiid larvæ can be found. At Ottawa, in early May, we place pieces of plank, bark, etc., along roadsides and in open spots in woods. These

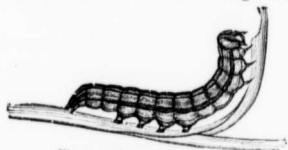


Fig. 27.—A noctuid caterpillar.

make excellent traps for larvæ which have hibernated and which, after feeding during the night crawl under such shelters to hide during the day. The traps are visited every day or so, and a great many specimens are found. Larvæ collected in this way should be kept separately in some kind of small jar or tin box. Ordinary small glass jelly jars are very useful for this purpose. The object of keeping each caterpillar by itself is to be sure of its identity when the moth emerges. If a number are put into the same small jar, some will likely be eaten by the others, especially if there is not plenty of food in the jar. Some earth should be put in the bottom of each jar for those larvæ which pupate in the ground. Fresh food should be given every day and care taken to keep the jars clean. When the caterpillars are found, full notes should be taken on their length, appearance and habits. There is a vast lack of definite knowledge on the early stages of many of our common caterpillars, so it is important to take complete notes.

If at all possible, at least one specimen of each kind should be preserved for future reference and study. This is best done by inflation, and specimens thus prepared are more valuable than those put in liquids. Proper apparatus may be purchased from dealers in entomological supplies, such as: an oven, in which to dry the empty skins while being inflated; a spirit lamp to furnish heat; some glass tubes drawn out to different sizes at one end; some clips made of watch spring and held to the glass tubes by means of a band cut from rubber tubing; a double rubber bulb with about three feet of tubing attached; and a pair of fine curved forceps. The process, briefly, is to (1) kill the caterpillar in a cyanide bottle; (2) place it on a piece of blotting paper, cover it with a strip of the same paper, and gently press out all the body contents through the anal orifice, using the pair of fine forceps; (3) slip the anal segment over one of the glass