

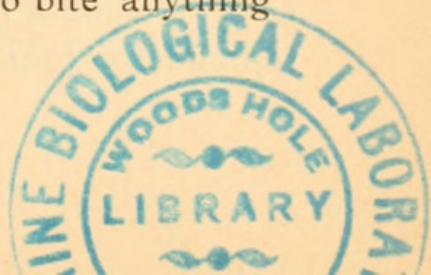
## HUNTING FOR CATERPILLARS.

---

By ARTHUR GIBSON,

The study of insect life is so intensely interesting that it is difficult to say which branch of entomology is the most fascinating ; each has its own devotees. One branch of the subject which certainly is exceptionally useful and fascinating, is the collection and study of our native caterpillars. Of late years much has been done in working out the life-histories of American insects, but there is still a vast field in which to make research. The life-histories of our butterflies are fairly well known, but only a very small per entage of the larvæ of even our common moths have been studied. Lepidopterous larvæ can be collected at any time of the year, but the best opportunities are to be found during the summer for acquiring a knowledge of these interesting creatures.

It is strange that most people seem to regard caterpillars as repulsive, horrid things ; but this, of course, can only be accounted for by the fact that they have never really taken the trouble to look at one. None of Nature's children are horrid. It is only our unfortunate uninterestedness that is accountable for such inaccurate views. There is really nothing in nature which is not beautiful, if carefully examined and properly understood, and, even those caterpillars which are thought by many to be most repulsive, are of themselves not at all responsible for feelings akin to disgust or horror. When exhibiting a case of butterflies or moths, it is quite usual for the onlooker to make some remark regarding the beauty of the specimens ; but, when shown the caterpillars of these same species, our visitor, as a rule, shrinks back, and a remark not at all corresponding with the first exclamation is heard. Although presenting sometimes a rather formidable appearance, with the exception of a very few kinds, which are provided with irritating hairs, caterpillars are quite harmless. Some of the Sphingidæ will jerk their heads from side to side and even snap their mandibles, but they are unable to bite anything





thicker than the edge of a leaf, as a very slight examination will show.

Insects are so abundant that they can be found at any time, and almost in any place. Their presence everywhere offers a ready means for learning something of the ways and habits of the creatures which constitute so large a portion of the animal kingdom. Even a cursory study of any of our caterpillars will soon convince one that there is much of interest as regards the habits of even the commonest species, many of which show remarkable traits.

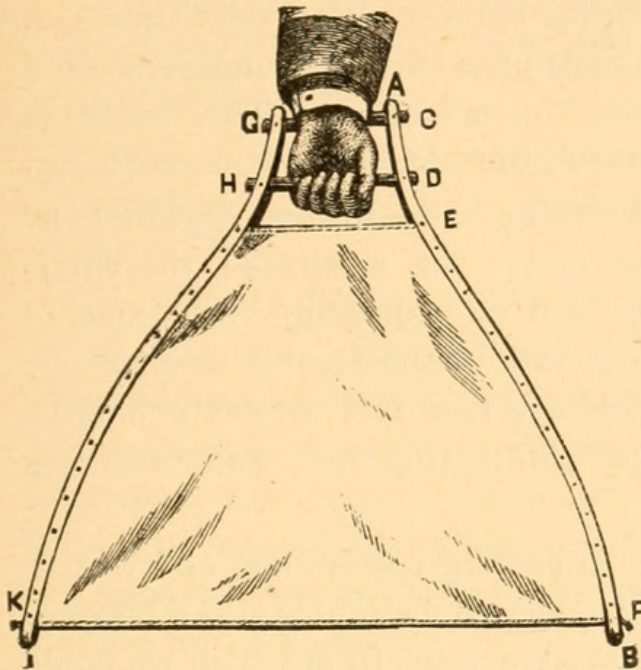
During the first warm days of spring, even before the snow has entirely disappeared, reddish or mouse-coloured hairy larvæ, about an inch in length, are often seen walking across the sidewalks of outlying streets, or especially along the railroad tracks. These are the caterpillars of *Phragmatobia rubricosa*, Harr., and are chiefly interesting to local collectors in view of the fact that two distinct forms of the moths have been met with at Ottawa, and it is not at all improbable that we may have here two good species instead of one, as now recognized by standard lists.

The spring time is also opportune for the collection of arctiid and noctuid larvæ, under stones, etc., particularly in open places. Along the grassy sides of railroad tracks there are usually numbers of strips of bark, broken pieces of plank, etc.; and, underneath the same, many of these larvæ, which pass the winter about half, or nearly full grown, can be found hiding at that time of the year. The old leaves of mullein plants also harbour various kinds of caterpillars.

After the May and June, by which time many caterpillars will have hatched from eggs laid during those months, doubtless the most prolific way of collecting larvæ is by beating them off the plant they are feeding upon, into a beating net. Dealers in entomological supplies have for sale nets made specially for the purpose; but the accompanying figure shows a good pattern for an easily made net, which can be held beneath the plants with one hand, while the larvæ are beaten down on to it with a light rod held in the other hand. This beating net consists of a stick on each side and a flat sheet of cotton between, three feet wide at the top and one foot at the bottom. Two cross bars close together



at the base allow of this net being easily held by taking the upper bar in the left hand, so that the lower bar rests against the back



of the wrist. We have used these nets in connection with our official field work and have found them very serviceable. Dr. Fletcher has recommended them in his departmental reports as of much value in collecting various insects which are troublesome to the market gardener, etc., so that they can be afterwards destroyed.

There are many kinds of caterpillars, however, which cannot be collected by beating, or gathered from beneath stones, bark, etc., on the ground. Some of these are borers, which pass the whole of their larval existence feeding inside the stems and roots of various plants. The caterpillars of the genus *Papaipema* (*Hydræcia*) have, within the last few years, been given special attention by some students. These larvæ are true borers and work within the stems of burdock, goldenrod, etc. *Papaipema cataphracta*, which bores in burdock, is a common species at Ottawa wherever the plants are numerous, and the presence of the caterpillar can usually be detected by the withering and discolouring of the tips. The caterpillars of *P. appassionata*, which have only recently been discovered, were found, by Mr. Henry Bird, of Rye, N.Y., feeding in the roots of the Pitcher-plant (*Sarracenia*). Last season, when at the Mer Bleue, the writer examined many pitcher-plants, but could not find any larvæ, although in the root of one plant the work of a noctuid caterpillar was detected, as well as some frass, but of course we do not know that it was of this species.

Other larvæ of smaller species of moths form various kinds of cases, inside of which they live and change to the pupal state,

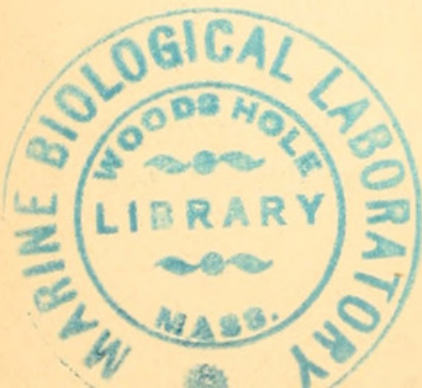


and some kinds even produce galls, or more or less decided enlargements of the stems of their food plant. These of course can only be collected by hunting for them at the proper time. A large number of still smaller caterpillars are leaf miners feeding on the soft cellular tissues under the epidermis. The moths of these leaf miners are very beautiful, but delicate little creatures.

The tips of plants may often be seen drawn together by threads of fine silk, and, if the leaves are separated, the caterpillar which caused this tying can be collected. A species of economic importance, because it does considerable damage at times, has been called the Greenhouse Leaf-tyer, from the habit it has of drawing the leaves of the plants together, and fastening them with silk.

The pleasure derived from collecting caterpillars and watching their varied habits, will be found very helpful and fascinating. There are many lessons which they teach us, from which we could derive untold benefit. Every species is worthy of study, and, as there is so much yet to be done in working out the life-histories of our butterflies and moths, particularly of the latter, there is in this branch of study alone a vast field for much original investigation. The value of such work cannot be overestimated. From an economic standpoint, it is only when a complete knowledge of all stages is known that we can hope for the best results in combating the ravages of many injurious species. I feel sure that anyone who devotes any time to the rearing of larvæ, will not regret the hours spent in collecting and watching their specimens. On the contrary, however, they will be surprised at the interest they find themselves taking in the development of their captures, and even if they should not be successful in bringing the specimens to maturity, they will not, I venture to say, allow this disappointment to lessen the interest aroused in these creatures.

---





Gibson, Arthur. 1903. "Hunting for Caterpillars." *The Ottawa naturalist* 17(4), 77–80.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/28109>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/369135>

**Holding Institution**

MBLWHOI Library

**Sponsored by**

MBLWHOI Library

**Copyright & Reuse**

Copyright Status: NOT\_IN\_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.