

Life History and Habits.

This insect passes the winter in the egg stage. The egg clusters are conspicuous white masses, usually containing from one hundred to over five hundred eggs, covered with a hard frothy substance. The eggs hatch in late May or early June and the tiny caterpillars feed upon the soft tissue on the underside of the leaves. As they increase in size they eat holes through the leaf, and when full grown devour every part of the leaf except the main ribs. The larval stage lasts five or six weeks, the caterpillars casting their skins five times. When they are nearly ready to pupate, they sometimes crawl to a considerable distance, and in this way spread to other trees. When they occur in great numbers, after completely stripping the trees upon which they have been feeding, they migrate to nearby trees. These may be protected by banding, which is described under remedies. In July the caterpillars are full grown and ready to pass into the pupal stage. They form their cocoons on the bark of the trunk or large branches of a tree, although the cocoons may be found on fences, buildings, telephone poles, etc. The insects remain in the cocoon about two weeks. The male, upon emerging, flies off seeking for a mate. The female is wingless and therefore cannot fly; but while she can crawl a short distance, she usually remains upon the cocoon from which she emerged. She deposits her eggs on the empty cocoon and shortly afterwards dies. The difference between the male and female is well shown in the illustration. These insects do not eat in the adult stage.

Food Plants.—The white-marked Tussock Moth feeds upon a great number of deciduous trees and shrubs, including fruit trees.

Distribution.—It is found from Jacksonville, Florida, to Northern New Brunswick and Quebec, and west to Nebraska and Oregon.

Description.—The various stages of this insect are shown in the illustration. A full grown caterpillar (a) has a coral red head, a pair of long, black plumes over it, another tail-like plume at the end of the body, four yellowish-white spots or tussocks on its back, and just behind these two small retractile red tubercles. Along the back there is a broad, black band bordered by narrow, yellowish stripes. The sides are dark grey with a black line indicating the position of the breathing pores. Below this the body is yellowish.

The adult female is about five-eighths of an inch in length, grey and wingless.

The male has feathery antennae and a wing spread of about one and one-quarter inches. The wings are marked with several shades of grey and greyish-white.

The eggs, as already stated, are deposited on the empty cocoon and covered with a mass of white frothy matter which forms an effective protection for them.