



Buck Moth

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Introduction

Buck moth (*Hemileuca maia*, Lepidoptera: Saturniidae) is a native species found in oak woodlands throughout the eastern United States. Buck moth caterpillars feed on the foliage of oaks and other host plants, but rarely cause much damage to the hosts. Buck moth is primarily important for the stinging spines found on the caterpillars.

Description

Adult buck moths have a wingspan of 2-3 inches (5-7.5 cm). The black, semi-transparent wings have a white band and prominent eye markings on the forewings (Fig. 1). The body is stout and hairy, with a grayish-black abdomen and a reddish orange or dark coloration at the tip.



Figure 1. Buck moth (Gerald J. Lenhard, Louisiana State University, Bugwood.org).

Buck moth caterpillars are about 2 inches (50 mm) long when full grown and can vary in color (Fig. 2). The head and legs range in color from orange to dark red or black. The rest of the body is usually black with small white spots, but some caterpillars may have an almost white body. The body is covered with tufts of short spines at the base of longer branched spines. Occasionally the tufts of short spines are lighter in color than the body or the color of the branched spines, and sometimes the branched

spines are black and white. Young caterpillars may be generally darker in color than mature caterpillars.



Figure 2. Buck moth caterpillar (Susan Ellis, Bugwood.org).

The branched spines are hollow and connected to venom glands. Contact with these spines produces a burning, itching sensation along with redness and inflammation similar to a bee sting. Sensitive individuals may experience nausea within the first few hours after contact.

Life History

The buck moth has a complete life cycle with egg, larval, pupal, and adult stages. There is one generation per year. The eggs, laid in the fall, overwinter and hatch in the spring.

Buck moth caterpillars are usually found in early summer, mainly in June. It is often confused with spiny elm caterpillars (the immature stage of the mourning cloak butterfly) and spongy moth caterpillars (previously known as gypsy moth), which are also active at that time. Young buck moth caterpillars may aggregate on the host plant or nearby vegetation (Figs. 3 & 4), but older

caterpillars tend to live singly. Mature larvae sometimes wander from their host plants before pupating. Adult buck moths emerge in the fall to mate and lay eggs.



Figure 3. A cluster of buck moth caterpillars (William M. Ciesla, Forest Health Mgmt. Intl., Bugwood.org).

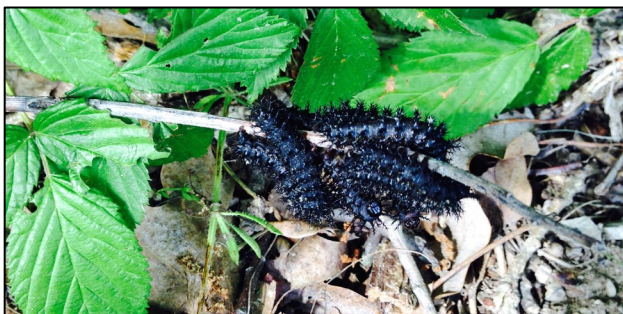


Figure 4. Buck moth caterpillars clustered on a stick (T. Dellinger, Virginia Tech).

Common Host Plants

Buck moth caterpillars are usually found on oak trees, but are found on willow, hazelnut, cherry, and rose as well.

Damage

Buck moth caterpillars are a nuisance because of their stinging hairs. A person "stung" by a venomous caterpillar should immediately wash the affected area to remove any insect hairs and venom that remain. An ice pack will help reduce swelling, and creams and lotions containing steroids will lessen the discomfort. People known to be sensitive to insect stings should consult their medical care provider. The site of contact may remain painful and sore for several days.

Control

Buck moth caterpillars rarely occur in sufficient numbers to be considered plant pests, but people who work with ornamental plants or spend time in wooded areas should learn to recognize them and avoid touching them. Consider wearing a long-sleeved shirt, wide brimmed hat, and gloves if working with host plants in an area where buck moth caterpillars have been seen.

Interesting Facts

While the caterpillars feed on the foliage of trees and shrubs, adult buck moths have no functional mouthparts and do not feed. Other species of buck moths in the genus *Hemileuca* are found across the United States.

Note

For more information about venomous caterpillars in Virginia, see Virginia Cooperative Extension publication ENTO-75, [Stinging Caterpillars: Slug Caterpillars and Flannel Moths](#).

Revised

Theresa A. Dellinger, January 3, 2023.

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