

Colorado Insect of Interest

Cecropia Moth

Scientific Name: *Hyalophora cecropia*
(Linnaeus)

Order: Lepidoptera (Butterflies, Moths, Skippers)

Family: Saturniidae (Giant Silk Moths)

Identification and Descriptive Features:

Caterpillars of the cecropia moth caterpillars are distinctively colored, bright green with rows of blue, yellow and red tubercles or "knobs" along their back. They are about 3 to 4 inches (7.5-10 cm) long when fully grown. Some people describe them as "big, green hotdogs".

Adults are very large moths with a wingspan of 4 5/16 to 5 7/8 inches (11-15 cm). The body is reddish and marked with white bands. The wings are dark brown and appear somewhat frosted due to scattered patches of lighter scales. Light crescent markings occur on the wings. Antennae of the males are quite large and plume-like.

Distribution in Colorado: Found throughout most of the eastern United States, the cecropia moth within the region is limited to areas east of the Rockies. They are most abundant in the lower foothills and along the Front Range. The closely related Glover's silk moth also occurs and is generally distributed at higher elevations of the Rocky Mountains.

Life History and Habits: This is a well-known representative of the family known as the giant silk moths. A distinctive feature of this group is the tightly woven silk cocoon that the larvae spin and pupate inside. The insect overwinters as a pupa inside the cocoon, which is fastened lengthwise to the branches of host plants.



Figure 1. Adult cecropia moth. Photograph by David Leatherman.



Figure 2. Head of a male cecropia moth showing the large plume-like antennae. Photograph by Howard Ensign Evans.

From April through June these large moths emerge from the overwintering cocoon. They are slow, ponderous fliers and sometimes can be seen flying in the early morning, but are most often seen when attracted to night time lights. They live briefly, less than a week, and do not feed, surviving on the energy reserves collected during the caterpillar stage.

Eggs are laid in small groups on a variety of trees and shrubs that serve as host plants, including viburnum, lilac, dogwood, walnut, willows, cherries, apple, ash, and poplar. The younger larvae initially feed as a group, but later stage caterpillars disperse and feed singly. Larvae potentially can be found on the host tree from June through October but the large larvae most often observed are encountered in mid to late summer. When full-grown the caterpillars may wander from the host and typically pupate in shaded, protected sites in the interior of plants. Only one generation is produced per year.

Cecropia moths appear to be less common than they have been in the past, reflecting a decline in the populations of many North American giant silk moths. Among the speculative causes for this decline are increased parasitization by introduced species of tachinid flies and adult mortality at lights.



Figure 3. Cocoon of a cecropia moth that protects the overwintering pupal stage.

Related Species: The Glover's silk moth, *Hyalophora columbia gloveri*, occurs at higher elevations within the region and may be found west of the Continental Divide. The Glover's silk moth is similarly marked to the cecropia moth, the primary difference being reddish-brown coloring along the interior of the wing, compared to gray areas in the cecropia moth. Larvae of the Glover's silk moth lack the reddish tubercles that are prominent with the cecropia and these are instead colored yellow. Caterpillars primarily feed on leaves of *Rhus trilobata*, but maple, willow, chokecherry, alder, and wild currant are among the other hosts. Formerly considered a distinct species, the Glover's silk moth is now classified as a subspecies of the Columbia silk moth, *Hyalophora columbia* (S.I. Smith).