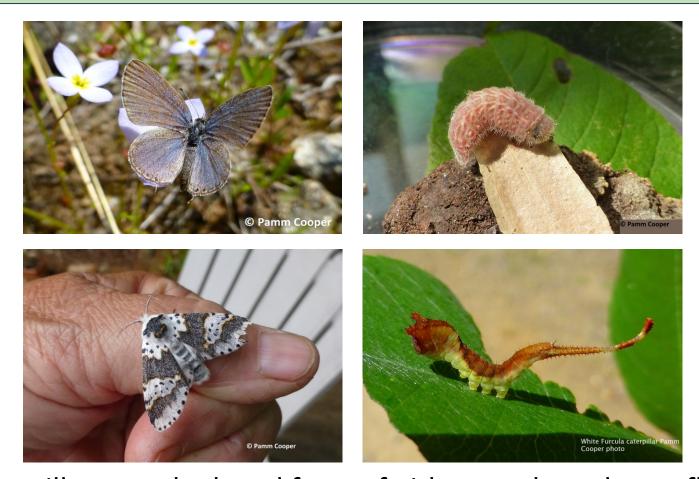
Caterpillars found in Connecticut



Presentation for 2021 UConn Bug Month by Pamm Cooper- UConn Home and Garden Education Center

What are caterpillars?



Caterpillars are the larval form of either moths or butterflies. Topbutterfly and caterpillar of the spring azure butterfly; Bottom- moth and caterpillar of the white furcula

Before pupating and then emerging as adults, caterpillars hatch from eggs that are usually laid on the host plant they will be feeding on



Orange striped oakworm moth, *Anisota* senatoria moth caterpillars are just hatching from a raft of eggs laid on red oak

Black swallowtail butterfly egg (inside circle) and tiny caterpillar recently hatched are on parsley, one of its host plants



Host Plants



Caterpillars may have many host plants or may be found on one specific family of plants

Fall webworm moth caterpillars are generalists feeding on many species of woody plants

Black swallowtail butterfly caterpillars feed on members of the carrot family like parsley, dill and Queen Anne's lace







Top left- the major sallow is found on pines

Top right- white marked tussocks feed on almost any woody plant

Bottom left- the double-toothed prominent feeds on elms





Caterpillars can change dramatically as they molt and grow to the final instar

The Abbot's sphinx moth caterpillar shown above has a yellow to orange knob on the rear and is a chalky white in early instars.

Before pupating the caterpillar is brown with alligator-like markings and the orange knob becomes a button

Life Cycle

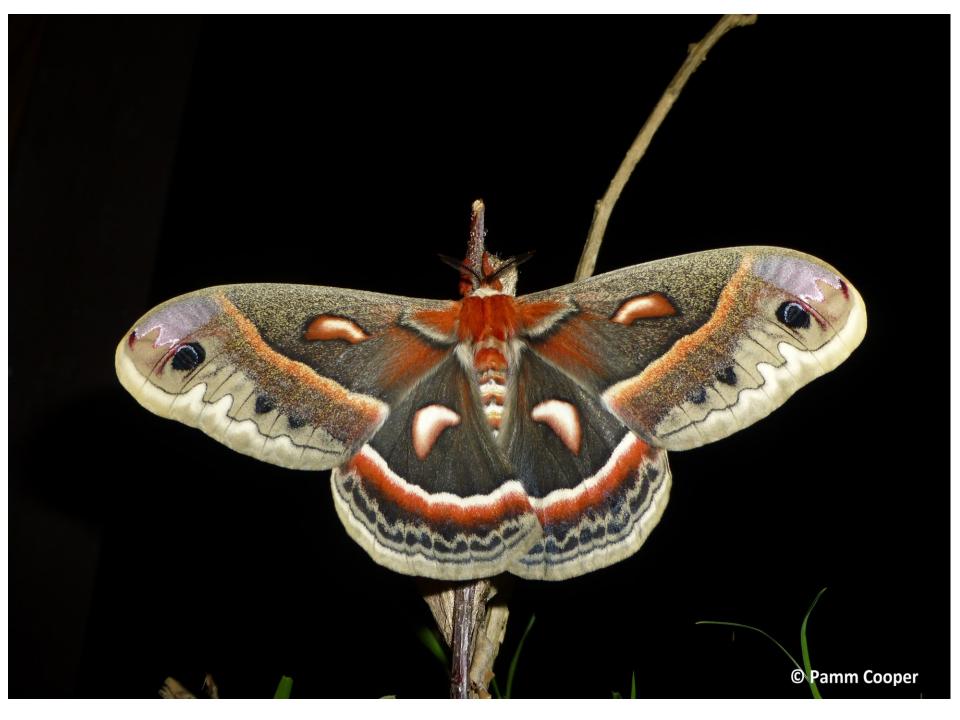
Caterpillars hatch from eggs and can take a few weeks to a few months to complete their life cycle, depending on species

Giant silkworm moths, for example, overwinter as a cocoon and emerge as adult moths the following year. The adults mate, females lay eggs, and both sexes die without ever fedding.

The giant silkworm caterpillars hatch, feed for a few weeks and form cocoons and they will overwinter until the following year



Caterpillar instars of the Cecropia giant silkworm moth *Hyalophora cecropia*





Some Moth Caterpillars

Loopers, Inchworms and spanworms – the Geometrids

Unlike most lepidoptera, geometrids have only two sets of prolegs on the abdomen on A-6 and A10 (abdominal segments are numbered 1-10)

Body color and form may be influenced by their diet, or by the lighting in the surroundings where they are found

Eggs may be laid in clusters, or singly, depending upon species







Loopers come in all shapes, sizes and colors. Often they will rest during the day stretched out between two twigs and are hard to spot, like the *Melanolophia canadaria* looper in the upper left image.

The filament bearer *Nematocampa* resistaria on bottom right, has two pairs of tentacles that it can expand and contract and even hook together to form two loops.



lo moth

Female, top, and male, bottom, Io moth *Automeris* io









Io moth egg, newly hatched caterpillars and middle instar caterpillars

After they hatch, these caterpillars form a train and follow the leader until the next instar

Spines on all instars will cause painful irritation if touched or brushed againts

Sphinx Moth Caterpillars

Caterpillars of sphinx moth generally have a horn or a button on the last segment of the abdomen.

Most feed on woody plants foliage, but some, like the gallium and hermit sphinx, feed on herbaceous plants

There are twelve species that feed exclusively on members of the grape family <u>Vitaceae</u>: grape, *Amelopsis* and Virginia creeper













Pandorus Sphinx Moth Eumorpha pandorus)

This sphinx moth caterpillar does not have the typical horn on the rear, but loses that in an early molt and has a 'button" instead.

Caterpillars can be found on grape and Virginia creeper and may be yellow, brown, tan or green



All images © Pamm Cooper

Slug Month Caterpillars















Clockwise from upper right: elegant tailed, smaller parasa, monkey slug(hag moth), spiny oak, crowned, skiff, and shagreened slug moth caterpillars

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Slug moth caterpillars are very small and can often be mistaken for galls or some other type of insect.

These caterpillars do not have the prolegs and forelegs typical of most caterpillars, but instead slide along on medial suckers, as shown on the underside of an elegant tailed slug moth caterpillar on the left







Skiff Moth- Prolimacodes badia

Like most slug moth caterpillars, when disturbed urticating spines can be raised which, when touched, can cause a painful sting









The saddleback caterpillar is an inch long at maturity and has spines over much of its body that release a stinging chemical when touched.

The "saddle" is an oval purple-brown spot in the middle of a large green patch on its back.

This caterpillar feeds on many plants including cherry, greenbriar, corn leaves, apple, rose, oak and other trees in late summer.

Dagger moth caterpillars

Most caterpillars of this subfamily Acronictinae feed on woody plants and are active in mid to late summer

Many have hairlike setae arising rom tufts or warts.

Dramatic changes occur in many dagger moths and later instars





Images © Pamm Cooper



Afflicted dagger on white oak



Datana spp. Alarm posture
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Ochre dagger instar before final molt, top, and final instar before pupating

Some Butterfly Caterpillars

89-94 percent of the caterpillars we find are moths while 6-11 percent are butterflies.

No butterfly caterpillars are considered hairy, while many moth caterpillars, but not all, may be hairy.

Both butterfly and moth caterpillars may be smooth, and both can have knobs or spikes, so to identify a caterpillar as either a moth or butterfly requires reliable research and experience with various species.

Raising them until they become adults would solve the puzzle.

Swallowtail Caterpillars





The caterpillars of all swallowtails have a forked, orange defense organ on the thorax called an osmeterium that they will evert when the larva is disturbed in any way. It emits a strong, disagreeable odor which serves to repel predators.

Above are images of the eastern tiger swallowtail butterfly caterpillar. During the day it rests on the upper side of leaf on the host plant, attaching itself with silk.



The caterpillar of the spicebush swallowtail hides in a leaf folded lengthwise on its host plants- sassafras or spicebush. Eye spots on the thorax give it a snake- like appearance. The caterpillar is green in middle instars, turning yellow-orange just before pupating.

Hairstreak caterpillars





Hairstreaks are very small butterflies and their caterpillars are likewise tiny and sluglike.

They are often found on new foliage, flowers and flower buds.



Images © Pamm Cooper

Eastern Pine elfin

The caterpillar of the eastern pine elfin can be found on white pines, often near blueberry and huckleberry which are a favorite nectar source of this butterfly.

Caterpillars are striped green and white and bland in with the needles of its host plant.





Brushfoots





One in every three butterflies are brushfoots.

Many form shelters to hide in during the day and feed openly at nights such as the American painted ladies shown on the left





Baltimore caterpillars have a limited host plant range- turtlehead and English plantain and later instars may feed on viburnum and honeysuckles





Eastern commas feed on stinging nettles. false nettle, elm, hops and wood nettle

Images © Pamm Cooper





Question Mark- *Polygonia interrogationis*

Question marks are members of the anglewing family of butterflies and have distinctive angled wings.

Sometimes eggs are laid in stacks on host plants- elms, willows, hackberry and other plants.





Question mark head close up. Spines are harmless

Red Admiral-Vanessa atalanta

 Red Admirals are found in open, sunny areaswoodland openings, edges of waterways, yards, abandoned fields and power lines....

Food: stinging and false nettles

 Caterpillars tie a leaf lengthwise, resting inside the shelter by day





Caterpillars of the red-spotted purple and the viceroy look very similar. Usually if found on cherry, it will be the red-spotted purple, if found on aspen or willow it could be either.

Skippers and Duskywings





Juvenal's Duskywing

The Juvenal's duskywing caterpillar eats the leaves of oaks

Look for caterpillar in a folded leaf shelter





Silver spotted skipper, *Epargyreus* clarus

One of the largest and most widespread skippers, its caterpillar hides inside a shelter made by tying two leaves together

The orange eyespots on the look like big eyes, useful for startling potential predators

Look on legumes, especially locusts



Images © Pamm Cooper





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