



# Nature's Notebook Phenophase Photo Guide

Malacosoma americanum eastern tent caterpillar



### Why Observe?

Eastern Tent Caterpillars (*Malacosoma americanum*) are a native moth and while they can defoliate trees, the trees rarely die as a consequence. Eastern tent caterpillars overwinter as an egg mass. After hatching, the caterpillars work together to build their silken tent, which they use for shelter during hot or rainy weather. After four to six weeks of feeding on leaves they pupate and the adult moths emerge three weeks later. Eastern tent caterpillar population size varies year to year, with large outbreaks every few years.

Knowing the timing of caterpillar emergence can shed light on food availability for birds as well as guide control measures.

#### **Tips for Identification**

Caterpillars are dark, moderately hairy, and have a distinctive white stripe going down the length of their backs. At maturity, they are 1.5-2" long. This species creates tents in crotches of branches of host trees.

Be aware that there is variation from individual to individual within a species, so your insect may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



Steven Katovich, USDA Forest Service, Bugwood.org. CC BY 3.0



*This Phenophase Photo Guide has been vetted by the USA-NPN NCO. It is appropriate for use as a supplement to the* Nature's Notebook *phenophase definition sheet for this species.* 



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### Mating

A male and female are seen coupled in a mating position, usually end to end. This can occur at rest or in flight.

Eggs

One or more eggs are seen on a plant. If possible, record the name of the plant or describe it in the comments field. For Malacosoma *americanum*, eggs are enclosed in a dark, shiny mass encircling a twig or small branch. Do not include empty egg masses after the caterpillars have chewed their way out of the eggs.



Joe Boggs

## Adults

One or more adults are seen moving about or at rest. For Malacosoma americanum, adults are reddish-brown with two pale stripes across each forewing.





Whitney Cranshaw, Colorado State University, Bugwood.org. CC BY 3.0

Egg laying

Caterpillars

A female is seen laying eggs on a plant. If possible, record the name of the plant or describe it in the comments field. For Malacosoma americanum, eggs are deposited on twigs or small branches of trees.

One or more caterpillars (larvae)

are seen moving about or at rest.

When seen on a plant, if possible,

describe it in the comments field.

covered in light-colored hairs, and

back and a row of oval, blue dots

record the name of the plant or

For Malacosoma americanum,

have a white stripe down their

caterpillars are black in color,



D. Elsner, MSU Extension

William M. Ciesla, Forest

International, Bugwood.org.

**Health Management** 

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#### Caterpillars in a tent

Caterpillars are seen in their tent. If possible, record the name of the plant on which the tent is built or describe it in the comments field. For Malacosoma americanum, silken tents are constructed around the crotches of tree branches and can become very large.

Lacy L Hyche, Auburn University, Bugwood.org. CC BY 3.0

# Caterpillars feeding

along each side.

One or more caterpillars are seen feeding. If possible, record the name of the species or substance being eaten or describe it in the comments field. For Malacosoma americanum, caterpillars feed on the leaves of trees.



Lacy L Hyche, Auburn University, Bugwood.org. CC BY 3.0

#### Pupae

One or more pupae are seen in a cocoon or shell (puparium). For Malacosoma americanum, pupae are enclosed in a white or pale vellow, silken cocoon, and attached to trees or other structures, often hidden in cracks, crevices or on the underside of branches or other outdoor surfaces. Do not include empty cocoons after the adult has emerged from them.

Phenophases not pictured: Dead adults, Dead caterpillars, Individuals at a light, Individuals in a net, Individuals in a trap