

# THE LASIOCAMPIDAE OF OKLAHOMA (LEPIDOPTERA)

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Keys and distribution data are presented for the six species of Lasiocampidae (Lepidoptera) that occur in Oklahoma.

The family Lasiocampidae contains the forest tent caterpillar, the western tent caterpillar, and the eastern tent caterpillar. The gregarious larvae of these three species make conspicuous tents and, therefore, at least their tents are well known. The adults of these three species, as well as the other three species of the family that occur in the state, are much less well known.

Our present distribution records are very sparse; however, it is logical to assume that most of the species included are likely to be found throughout at least the eastern half of Oklahoma with *Malacosoma californicum lutescens* restricted to the western half of the state.

## Key to the Species (Adults)

1. General color brown; forewings with light or dark lines running from front to back;  $R_4$  of forewing free, arising from the discal cell----- 4  
 General color not brown or if brown without the lines running across the wings;  $R_4$  of forewing stalked with  $R_5$  &  $M_1$ ----- 2
2. Wings grey with a white line running across the forewing; humeral cell of hindwing much smaller than discal cell----- *Tolyte velleda*  
 Wings not colored as above; humeral cell of hindwing as large as discal cell ----- 3
3. Wings with a pronounced scalloped appearance; forewing with 5 radial veins----- *Phylodesma americana*  
 Wings without a scalloped appearance; forewing with 4 radial veins ----- *Heteropacha rileyana*
4. Lines on forewing dark, wings reddish brown, often with indentations ----- *Malacosoma disstria*  
 Lines on forewing lighter than background color, usually without indentations or wings yellowish----- 5
5. Wings reddish brown with light lines ----- *Malacosoma americanum*  
 Wings yellowish with a dark median band, lines dark----- *Malacosoma californicum lutescens*

## Key to the Larvae

1. Body with prominent lateral protuberances ----- 2  
 Body without prominent lateral protuberances ----- 3
2. Body segments with a pair of verruca-like swellings on the dorsum ----- *Tolyte velleda*  
 Body without the paired verruca-like swellings on the dorsum ----- *Phylodesma americana*
3. Body depressed; head depressed ----- *Heteropacha rileyana*  
 Body and head not depressed, cylindrical ----- 4
4. Mid-dorsal line whitish, without interruptions ----- *Malacosoma americanum*  
 Mid-dorsal line interrupted----- 5
5. Mid-dorsal line a series of keyhole-shaped marks ----- *Malacosoma disstria*  
 Mid-dorsal line interrupted, but not keyhole-shaped----- *Malacosoma californicum lutescens*

## DISCUSSION

*Heteropacha rileyana* Harvey.

According to Franclemont (1), this species has two broods a year in Missouri and Texas with a third or partial third in Texas. The host plant is honey locust, *Gleditsia triacanthus* L. Adults have been

collected in Payne and Mayes counties in March and June.

*Malacosoma americanum* (Fabricius)

Preferred hosts for oviposition are species of *Prunus*, *Malus*, *Crataegus*, and related plants. However, the larvae will feed on other plants (2). In Oklahoma, the tents of the eastern tent caterpillar are a common sight in plum thickets in the eastern part of the state. *Malacosoma americanum* is replaced by *M. californicum lutescens* in the western half of the state. According to Stehr and Cook (2), only a slight overlap of the two species occurs just east of Guthrie. No hybrid specimens are known to exist. *Malacosoma americanum* adults have been collected from Payne and Logan counties and no doubt will be found throughout eastern Oklahoma. Adults were collected in May, June, and July. Larvae have been collected from Wagoner, Creek, Muskogee, Tulsa, Haskell, Okmulgee, Mayes, Sequoyah, LeFlore, and McClain counties.

*Malacosoma californicum lutescens* (Neumoegen and Dyer)

*Malacosoma californicum lutescens* has been known (as *M. lutescens*) by the common name prairie tent caterpillar. Stehr and Cook (2) suggested as a result of a revision of the status of several prior species that *M. californicum* and its subspecies be called the western tent caterpillar. Food plants include *Prunus*, *Amelanchier*, *Rosa*, *Ribes*, and *Salix*. Stehr and Cook (2) report this species from Logan county. We have collected larvae from Alfalfa, Beckham, Blaine, Caddo, Cimarron, Custer, Dewey, Ellis, Garfield, Grady, Grant, Harper, Kay, Kingfisher, Murray, Major, Stephens, and Woodward counties.

*Malacosoma disstria* Hubner

The forest tent caterpillar feeds on a wide range of hosts. According to Stehr and Cook (2), *Populus tremuloides* Michx. is one of the preferred hosts; but the larvae feed on several other genera of trees. Adults have been collected in Oklahoma in June and July. Carter, Delaware, Mayes, Payne, Pittsburg, Rogers, and Tulsa counties.

*Phyllodesma americana* Harris

The preferred host plant is *Quercus* (1). Adults have been collected in Oklahoma in Payne county in March and April. Larvae have been collected in May and June in McCurtain and Sequoyah counties.

*Tolyte velleda* (Stoll)

Larvae have been collected on *Quercus*, *Betula*, *Ulmus*, *Tilia*, and *Fraxinus* (1). Adults in Oklahoma have been collected in Payne county in October.

## REFERENCES

1. J. G. FRANCLEMONT, The Moths of America North of Mexico, Fasc. 20.1: 25-86 (1973)
2. F. W. STEHR and E. F. COOK, Smithsonian Institution U.S. Nat. Mus. Bull. 276, 321 pp. (1968)