

Nature Week at Heritage Village - June 14th

Tent caterpillars (don't eat them)

"From a cocoon fastened to the edge of a shingle on a weathered barn she (the tent caterpillar moth) had struggled free into the warmth of the slanting rays of a four o'clock June sun. Other of her kin had emerged from similar yellowish cocoons hidden in cracks and crevices of tree trunks, field-stone walls, corn cribs, and houses. Creatures of warmth and darkness, myriads of moths took to their wings. Summer was still young. . . .

Crammed into that first night of life were the experiences which other animals live in weeks or months or years. Time was short, a destiny was to be fulfilled. As soon as her wings were unfolded, stretched and tempered with drying, the moth was mature. She experienced no adolescence, no learning. She flew without trial, without instruction. . . She flew a sustained flight of thirty minutes without pausing to rest. When she did rest, the respite lasted scarcely fifteen minutes. Another, flight, a rest, a flight, and so on till morning... During her brief rests the moth had arched her abdomen to the night breeze and dispensed an alluring scent, a scent of which other creatures were unaware, a scent that held meaning only for males of her own species. Sometime during that night her call was answered. She was courted and mated.

The day was a time for rest. . . by evening (she) once again took to wing. This night was not for courting. She scouted the hedgerows; she entered the orchards. On the cherries and apples, guided by subtle botanical scents, she laid her eggs." On the third day she died; her mission complete.
from The World of the Tent-Makers by Vincent G. Dethier

Those eggs, deposited on the tip of a branch and covered with a varnish-type substance, will survive the heat of summer and the bitter, cold winds of winter, and will emerge next spring as caterpillars just as their food source, the life-sustaining leaves of the fruit tree, emerge. Once they hatch, *en masse*, they will venture out daily to eat just before dawn, again at mid-afternoon, and just after sunset. Between times, they will spin a communal tent as retreat. In this protective covering, made of fine silk, they will grow and molt. After the fourth molt they will eat only at night and prepare to venture off to find a solitary, protected place to form a cocoon from which the adult moth will emerge about two weeks later. The entire cycle, from egg back to egg, is completed in about two months.

Defense mechanisms

The caterpillars have evolved a multi-pronged protection plan. First, when the caterpillars first hatch they are too **small** to be worth eating. But as they grow through successive molts, they gain weight and become attractive for bird and ant predators. With each molt they grow more **hair**, which is a protection from ants, and they get more colorful. By this time the caterpillars have consumed large amounts of fruit leaves. Both cherry and apple leaves contain cyanide (as do apple seeds). The caterpillars accumulate this poison and emit a **toxic** cyanide juice. Birds avoid these colorful, but deadly, insects. Also the **tent** itself offers protection. It is made of durable silk, hard for predators to penetrate. Lastly, communally they can move in **synchrony** thus appearing to be one large animal that a naive predator might avoid. This year I see fewer tents so I suspect that winter took its toll.



The moth prefers to lay her eggs on fruit trees that offer a dose of cyanide.

www.prairiehaven.com/?page_id=7868



"They (the tents) are exquisitely constructed of finest gossamer, marvelously engineered, cunningly adapted to need, but monuments to ugliness." Not built to be beautiful, the tent is an insulated retreat, offering moderated temperatures all day.



I asked Lorie if she could get a photo of their face and she responded that she could not tell which end it was on.



**MACKINAW
NATURE
CENTER**

by Sandy Planisek 2015
Issue #11