

# Oak Skeletonizer

*Prepared by Milton G. Savos  
Extension Entomologist  
Department of Plant Science*



SKELETONIZED LEAVES

COCOONS



COOPERATIVE EXTENSION SERVICE  
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THE UNIVERSITY OF CONNECTICUT, STORRS, CT 06268

**D**uring September and October many Connecticut residents are often annoyed by small “worms” hanging or dropping on silken threads from many shade trees and/or they become concerned by the sudden appearance of numerous small white cocoons on homes, on other buildings or structures, on the leaves, twigs and trunks of trees and other nearby objects. The level of annoyance and concern is usually related to the number of “worms” or cocoons involved.

The “worms” (actually caterpillars) and cocoons are those of an insect known as the oak skeletonizer. Adults are moths belonging to a group commonly called ribbed cocoon makers. They occur throughout northeastern United States and southeastern Canada. They are not usually present in pest proportions but sporadic outbreaks do occur over their range. Oak skeletonizers have two generations a year; individuals of the second or fall generation are the cause of most of the annoyance and concern.

**Description of Pests.** The adults are narrow-winged moths, whitish with brown markings, and a wingspan of about 5/16 of an inch. The full grown larvae or caterpillars are yellowish-green in color and about 1/4 to 3/8 of an inch long. The white, silken, longitudinally-ridged cocoons are about 1/4 of an inch long.

**Trees Attacked.** The larvae feed on both forest and shade trees of various species of oak — especially red and black oaks — and chestnut.

**Control.** No controls are recommended. As already stated, oak skeletonizers are more of a nuisance than a problem. By the time the larvae or cocoons are noticed, it is too late to do anything about them. Fortunately they have a number of parasites or predators to help keep them in check.

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**Damage.** Newly hatched larvae feed inside the leaves, producing serpentine and blotch mines; older larvae feed externally on the undersides of the leaves and skeletonize them by eating out the green tissue between the veins. As the injury becomes more severe, the upper surfaces of the leaves dry out and turn brown. Although oak skeletonizers can completely defoliate trees, this type of injury is relatively rare in Connecticut. Feeding by the larvae of the second generation is not generally a problem because the leaves have already completed the bulk of their food-producing activities by the time most of these caterpillars appear.

**Biology.** The oak skeletonizers spend the winter in the pupal stage in cocoons. They complete their development in the spring and the adult moths appear in April and May. Mating occurs and eggs are laid on leaves. The larvae that hatch from these eggs chew their way into the leaves and feed internally as miners. In order to grow, the larvae must undergo a series of molts in which they shed their old, rigid skeletons and secrete larger new ones. In preparation for this process, the larvae emerge from the leaves and spin small, flat, white webs on the undersides of the leaves. Molting takes place under the webs. The older larvae feed externally as skeletonizers on the lower surfaces of the leaves. When ready to molt they, too, spin the small flat webs; webs become very noticeable as the season progresses. The larval development period requires about five to six weeks to complete. When the larvae are full grown, they drop from the trees on silken threads in search of a place to construct their cocoons. Occasionally first generation larval populations are exceptionally high and hanging "worms" can be a nuisance in June. Moths of the second generation emerge during July and August and the cycle is repeated. The population of this generation is usually considerably larger than that of the first. The larvae of this second generation construct the cocoons in which they will pass the winter. These cocoons are very conspicuous during years when the oak skeletonizers are abundant.

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