

Western Hemlock Looper Biology & History

The western hemlock looper is periodically destructive in coastal and interior forests, reaching outbreak proportions every 11 and 20-plus years, respectively.

Outbreaks usually last about three years, after which they are generally brought under control by the action of parasites, predators, and diseases. Heavy rains during the moth flight period can reduce egg-laying and hasten the decline of an outbreak.



Life Cycle

Larvae hatch from eggs in the spring. Feeding by early instars during May, June and early July is light, and not particularly noticeable. As larvae grow larger, from the middle of July to October, they feed voraciously on both new and old foliage.

The larvae are wasteful feeders, chewing off needles at their bases and thus causing the stand to appear yellowish-red and then brown in color. In heavy infestations, trees may be stripped in a single season.



Defoliation starts in the upper crown, but as feeding progresses more and more of the crown is affected, increasing the risk of mortality. Late in summer, larvae are very mobile, crawling over tree trunks and shrubs, and dropping by silken threads from the trees to the ground. By fall, the ground may be littered with parts of needles, insect frass, and later by thousands of dead moths.