

FOREST Pest LEAFLET

Pacific Forestry Centre

Saddleback Looper

R.L. Ferris

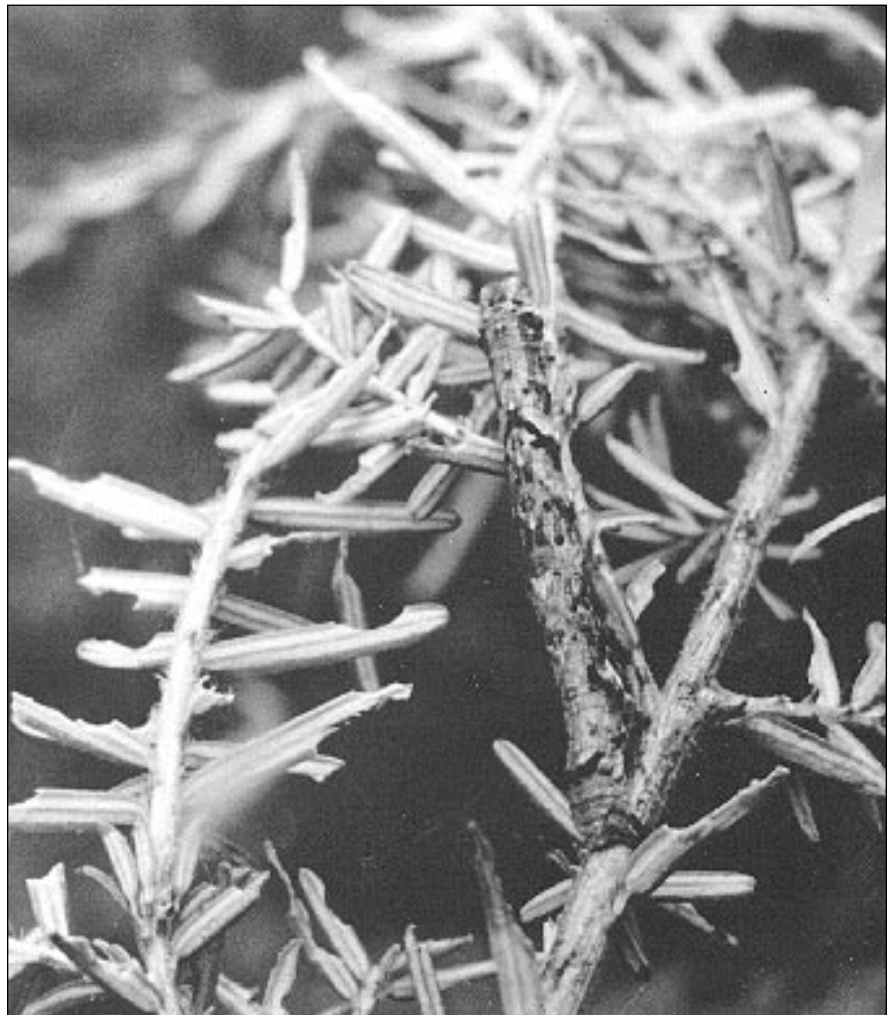
Introduction

The saddleback looper (*Ectropis crepuscularia*) is a defoliating insect that occurs in the southern two-thirds of British Columbia. Until 1960, saddleback looper was not regarded as a dangerous forest defoliator, although a light infestation at Blue River in the North Thompson River Valley from 1951 to 1953 caused noticeable defoliation to overstory trees. Severe infestations, however, occurred in 1960 and 1961 at Kitimat, resulting in extensive tree mortality on over 4000 ha of coniferous forests. In 1969 light to moderate defoliation occurred from Wedeene River south to Emsley Cove near Kitimat.

During the 1970s, 1980s and early 1990s, this looper has been mostly innocuous throughout its range. Noticeable populations, as on the Queen Charlotte Islands in 1980, have been few and scattered. There are no records of significant defoliation anywhere in B.C. by the saddleback loopers during the past 20 years.

Hosts and distribution

The saddleback looper occurs across North America. In B.C. it is most abundant in coastal and interior wet



Larva on western hemlock branch



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Larvae and feeding damage on *Tsuga heterophylla*

belt areas. The preferred host is western hemlock (*Tsuga heterophylla*), but most other coniferous and deciduous trees and shrubs are defoliated in saddleback looper outbreaks.

Description

Egg: The egg is approximately 1 mm long, ovoid, translucent green, and enmeshed in light green silk.

Larva: The larva is approximately 32 mm long. The first two instars are nearly black with fine white bands around the body. In the third and fourth instars it has a distinct inverted "V" or "chevron" on the second abdominal segment, but this marking becomes indistinct and is often missing in the last instar. The last instar is brown-grey with a reddish diamond-like mark on the back.

Pupa: The pupa is 12-15 mm long and 2-5 mm wide. At first greenish, the pupa turns light brown and eventually dark brown.

Adult: The light-grey moth has a wingspan of about 32 mm. The wing pattern of darker grey markings is indistinct and variable.

Life history

Moths emerge in early or mid May, mate, and lay eggs in groups of 10-20 in bark crevices and under the moss on tree boles. The young larvae feed on the understory and ground cover plants; later, they move up into the crowns of the larger trees. In August, the larvae drop to the ground and pupate in the duff where they overwinter.

Symptoms and damage

When infestations occur, the saddleback looper is capable of rapid defoliation of host plants. Defoliation may be heavy also on ground cover and understory trees. Defoliation of these

plants often is more noticeable, when on foot, than defoliation of the overstory trees. As a result, the interior of an infested stand may appear similar to the situation after a severe ground fire has swept through.

Larvae, when numerous, consume foliage rapidly. By mid-June a faint discoloration of the current year's foliage can be seen. However, by the time this defoliation can be seen from the air, the infestation is well advanced.

Some reduction in tree growth may result from a severe outbreak of this looper. Tree mortality is unlikely, although some understory trees may be killed after two or more years of infestation.

Control

Natural Factors

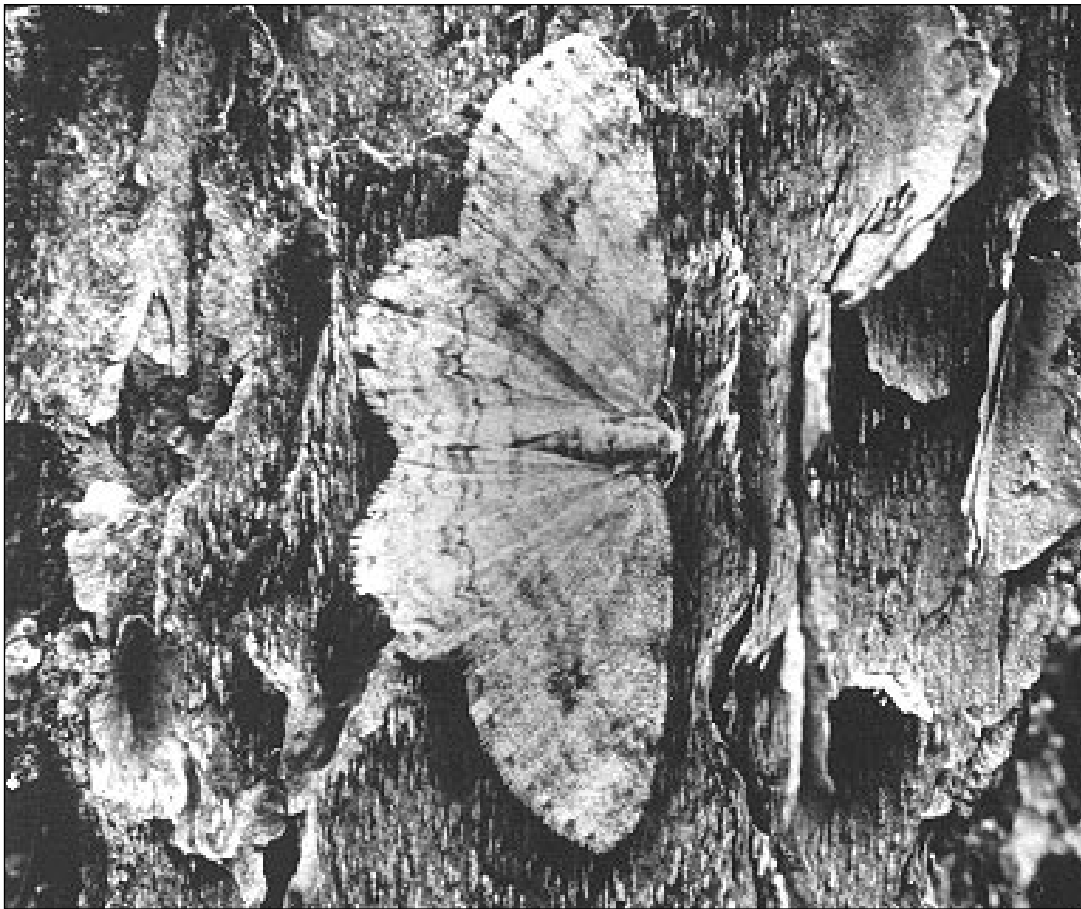
Parasites, predators, disease and adverse weather are important factors in reducing populations during outbreaks.

A polyhedral virus disease has been an important factor in controlling infestations.

Direct Control

Only one control operation using insecticides has been conducted in B.C. during the past 35 years. The need for spray treatment will likely remain low should the occurrence of the looper continue as in the past. Thus, large-scale aerial control operations are unlikely in the near future.

In the case of a few ornamental trees, plants of high amenity value, or for some landscape considerations, an insecticidal spray treatment may be appropriate. Consult local forestry, horticultural or pesticide management officials for details.



Adult on tree bark



Larvae clustered on understory devil's club

Selected references

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- Ruth, D.S.; Silver, G.T. 1966. A review of some forest insect survey records associated with population trends of the saddle-backed looper, *Ectropis crepuscularia* (Schiff.). Can. Dept. For. and Rural Dev., Inf. Rep. BC-X-7.
- Silver, G.T. 1961. Notes on the chemical control of *Ectropis crepuscularia* Schiff., at Kitimat, B.C. Proc. Ent. Soc. B.C. 58:13-16.

Additional Information

Additional copies of this and other leaflets in this Forest Pest Leaflets series, as well as additional scientific details and information about identification services, are available by writing to:

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