



Timber Talks



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UNSIGHTLY YOUNG DOUGLAS FIR

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There is evidence that the activities of a bark-mining insect, previously considered of somewhat minor importance, may be important in localized areas in the coastal regions of British Columbia. Damage may occur in young Douglas-fir stands that could cause concern to those engaged in programs of reforestation and to the growers of Christmas trees.

The damage is mainly depreciation of the tree, due to its unsightly appearance from numerous irregular channels the insect had chewed in the phloem. These tunnels or mines, which are slightly more prevalent on the sunny side of the tree, vary in length from 1' to 3' and usually commence near the third internode from the tree top. Tunnels from young larvae are small and difficult to detect, but the activity of older larvae is easily observed by discoloured swollen areas on the bark and by distorted and weathered scars. Fortunately, the mines do not usually become the site for fungi establishment nor do they become inhabited by secondary tree-damaging insects.

The small beige coloured adult moths emerge in May or June and shortly thereafter mate and lay eggs on the smooth bark of the trees. About three weeks later the eggs hatch and the young larvae tunnel first beneath the epidermis and then into the phloem. Mining within the phloem and development of the larvae usually slows in September when activity is arrested as the larvae begin overwintering in the partially completed mine. The following spring, activity is resumed and the mining and larval development continues until it is completed in April or May.

Considerable natural control of these bark-miners exists. Numerous parasites caused heavy mortality among the larvae; several birds are efficient predators, and it is estimated that ants and other insects devour fifty percent of the eggs. Under natural forest conditions this insect is thinly dispersed, but where the forests are disturbed and reproduction has become established there is a likelihood that the population will increase.