

NEWS RELEASE

USDA Forest Service -- Northern Region



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News Contact: Gregg DeNitto, 406-329-3637

FOR IMMEDIATE RELEASE

SPRUCE BUDWORM DEFOLIATING DOUGLAS-FIRS

Missoula, MT....Western spruce budworm, an insect native to western North America, is defoliating Douglas-fir, western hemlock, and other conifer species in many parts of Montana and Idaho. Defoliated trees have turned reddish-brown and are quite visible on hillsides.

“The numbers of these insects began to increase several years ago and they are now at an outbreak stage in many areas,” said Gregg DeNitto, Group Leader of the Forest Service Field Office in Missoula. “Our records indicate that this is a natural cycle that is influenced mainly by weather conditions,” he added.

Budworm larvae, or caterpillars, feed in the spring in the developing buds of mainly Douglas-fir, true firs, and spruce. They continue feeding on the needles of the current year, but will also eat previous years’ needles when populations get large. The larvae commonly descend from the needles on silk threads and land on smaller, understory trees. In late July the adults begin to fly and lay eggs. An abundance of these small, brown mottled moths have been appearing in many areas of Idaho and Montana.

Normally, spruce budworm does not kill trees, but reduces growth and kills tree tops. Smaller trees in the understory experience more mortality than larger trees because larvae drop from the large trees and collect and feed on smaller trees. The more defoliation a tree experiences over a number of years, the higher the likelihood of mortality to occur. Larger Douglas-fir that have been heavily defoliated may be more prone to be attacked and killed by the Douglas-fir bark beetle which we have been seeing at high levels for a number of years.

“The last outbreak of spruce budworm lasted for over 25 years,” said DeNitto, “although there was considerable fluctuation in the level of mortality each year in specific locations.” The area defoliated ranged from over 1 million acres to nearly 5 million acres. Aerial surveys in 2005 identified almost 500,000 acres defoliated in Montana and north Idaho. “Indications are that the amount of defoliation in 2006 has increased, but we don’t have estimates yet,” he added.

Budworm populations are usually highest and have the most significant effect in certain types of forests. Forests that are on sites that are warm and dry, are dense with multiple crown layers, and are of poorer vigor are the most likely to be affected by spruce budworm.

Control options are somewhat limited over large areas. Keeping a stand of Douglas-fir and true firs growing vigorously is the best way to reduce the effects of budworm. Stands that have only a single canopy layer usually suffer less damage. This doesn’t mean there won’t be defoliation, however. The only way to reduce defoliation is by killing the budworm larvae as they begin feeding on needles in the late spring and early summer. Several insecticides are available for treating individual trees and tree stands. Private landowners wishing to treat individual trees or budworm infestations should contact their local Montana Department of Natural Resources and Conservation (DNRC) or Idaho Department of Lands office for additional information. More details on western spruce budworm can be found on the internet at http://www.fs.fed.us/r1-r4/spf/fhp/mgt_guide/western_spruce_budworm/index.html .

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