

SALMON-CHALLIS NATIONAL FOREST

Challis, Middle Fork, Yankee Fork Ranger Districts

2013 Aerial Insect and Disease Detection Survey



1:126,720



INSECT & DISEASE ACTIVITY

BARK BEETLES

Species	Mortality	Symbol
Mountain Pine Beetle	1-4	Red square
Lodgepole pine	5-14	Red circle
Whitebark pine	>15	Red square with 'X'
Douglas-fir Beetle		Purple circle
Western Pine Beetle		Yellow circle
Unidentified Bark Beetle		Black circle

ADDITIONAL SYMBOLS AND DAMAGE AGENTS

Symbol	Description
Orange outline	Survey Area
Green outline	Boundary
Black outline	# - Trees affected
Black outline	#A - Trees/Acre affected

MORTALITY & DISEASE

Species	Mortality	Symbol
Subalpine Fir		Green circle
Balsam Woolly Agedig		Green square

Symbol	Description
Green outline	# 20
Green outline	#A 20

DEFOLIATORS

Species	Defoliation	Symbol
Western Spruce Budworm	NR, Light, Heavy	Blue hatched box
Douglas-fir, True fir	NR, Light, Heavy	Blue hatched box
Unknown Defoliation	NR, Light, Heavy	Orange hatched box
Douglas-fir	NR, Light, Heavy	Orange hatched box

Symbol	Description
Blue hatched box	NR - Not Rated
Blue hatched box	Light <50%
Blue hatched box	Heavy >50%

Symbol	Description
Aspen	-Asp
Bristlecone pine	-B
Douglas-fir	-DF
Larch	-L
Lumber pine	-Lm
Lodgepole pine	-LP
Mtn Mahogany	-MMH
Ponderosa pine	-P
Spruce	-S
Subalpine fir	-SAF
Whitebark pine	-WBP

Aerial Insect & Disease Detection Surveys
Aerial insect and disease detection surveys are conducted annually to detect and monitor annual, visible, vegetation damage primarily caused by insects. Aerial detection surveys are intended to detect new activity, to monitor the trend of ongoing activity, to provide general location information, and to subjectively rate levels of defoliation. These flights are conducted in a joint partnership between the USDA Forest Service, Idaho Department of Lands, and The Nevada Division of Forestry.

Data represented on this map are based on trees visibly affected by forest insects, as detected by aerial observers. Most bark beetle-killed trees are typically symptomatic (faded foliage that is yellow, orange, or brown) until nearly a year following beetle attack. Therefore, the numbers of trees killed by bark beetles, as indicated on this map, are a reflection of last year's mortality. The numbers do not reflect the current year's beetle population or number of currently attacked trees.

Observers have just a few seconds to recognize, identify, and document observed activity. Air turbulence, cloud shadow, haze, smoke, and observer experience can all affect the quality of the survey.

*****Disclaimer*****
Insect and disease data should be used only as an indicator of insect and disease activity, and should be ground-truthed for actual location and causal agent. Polygons indicate locations of tree mortality, defoliation, and/or other damage. Intensity of damage is variable, and not all trees and areas indicated are dead or damaged. The joint cooperators reserve the right to correct, modify, update, or replace the data as necessary. Using this data for purposes other than those for which it was intended may yield inaccurate or misleading results.

Forest Health Protection Bureau Field Office 01/16/2014

