

# UINTA-WASATCH-CACHE NATIONAL FOREST

Heber, Pleasant Grove, and Spanish Fork  
Ranger Districts

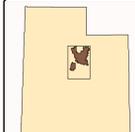
2012 Aerial Insect and Disease Detection Survey



## INSECT & DISEASE ACTIVITY

### BARK BEETLES

Species	Mortality
Mountain Pine Beetle (MPB)	1-4
Lodgepole pine	5-14
Limbir pine	15+
Ponderosa pine	20
Douglas-fir Beetle (DFB)	20
Fir Engrafer Beetle (FEB)	20
Spruce Beetle (SB)	20
ips confusus	20
Lodgepole pine	20
True fir	20
Spruce spp	20
Pinon pine	20



### MORTALITY & DISEASE

Species	Mortality
Subalpine Fir Mortality (SAF)	20
Decline -Aspen	Light, High, Heavy
Decline -Aspen	Light < 50%, Heavy > 50%

### DUAL CODES:

### DEFOLIATORS

Species	Defoliation
Wstrn False Hemlock Looper	Light, Heavy
White fir	Light < 50% defoliated, Heavy > 50% defoliated
Unknown Defoliation	Light, Heavy
-Aspen	Light < 50% defoliated, Heavy > 50% defoliated

### ADDITIONAL SYMBOLS AND DAMAGE AGENTS

Survey	Boundary	# -Trees affected	Aspen	Ponderosa pine	P
-Area	-Area	#A -Trees/Acre affected	-Asp	Douglas-fir	DF
			L	Spruce	S
			X, Lm	Subalpine fir	-SAF
				Limbir pine	-Lm
				Whitebark pine	-WBSP
				Lodgepole pine	-LP

**\*\*\*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.

**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 not typically symptomatic (taded 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.