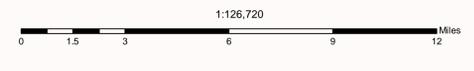


HUMBOLDT-TOIYABE NATIONAL FOREST Jarbidge Ranger District 2015 Aerial Insect and Disease Detection Survey



INSECT & DISEASE ACTIVITY			
BARK BEETLES		Mortality	DEFOLIATORS
Mountain Pine Beetle	Limber pine	1-4	Unknown defoliation
Whitebark pine	Douglas-fir	4-14	-Aspen, Willow
Douglas-fir Beetle	Douglas-fir	15+ Trees	Douglas-fir Tussock Moth
			Douglas-fir, True fir
MORTALITY & DISEASE			
Subalpine Fir Mortality	Subalpine fir		
Foliage Disease	Aspen, Willow		
ADDITIONAL SYMBOLS AND DAMAGE AGENTS			
Multi Codes:	# -Trees affected	Survey	-Boundary
	#A -Trees/Acre affected		-Area
MPB-Mountain Pine Beetle	Aspen	Min Mahogany	-MMH
FTC -Forest Tent Caterpillar	Bristlecone pine	Ponderosa pine	-PP
Decline-Aspen Decline	Douglas-fir	Spruce	-S
TM-Douglas-fir Tussock Moth	Larch	Subalpine fir	-SAF
	Limber pine	Whitebark pine	-WB
	Lodgepole pine		

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 (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.