



National Forest
 Tribal lands
Damage Agent*
 Western spruce budworm defoliation
 Aspen defoliation and mortality
 Piñon needle scale
 Ponderosa pine bark beetles
 True fir mortality from bark beetles
 Douglas-fir tussock moth
 Douglas-fir beetle

*Only agents affecting greater than 5,000 acres Region-wide are depicted. Additionally, individual small areas (< 2 acres) not visible at this scale.



Aerial Detection Survey Data Disclaimer
 Forest Health Protection (FHP), Arizona State Forestry Division, and the New Mexico State University Cooperative Extension Service strive to maintain an accurate Aerial Detection Survey (ADS) dataset, but due to the conditions under which the data are collected, FHP and its partners shall not be held responsible for missing or inaccurate data. ADS are not intended to replace more specific information. An accuracy assessment has not been done for this dataset; however, ground checks are completed in accordance with local and national guidelines:
<http://www.fs.fed.us/foresthealth/aviation/qualityassurance.shtml>
 Maps and data may be updated without notice. Please cite "USDA Forest Service, Forest Health Protection, Arizona State Forestry Division, and New Mexico State University Cooperative Extension Service" as the source of this data in maps and publications.

This map represents the mortality and defoliation that has occurred since the previous surveys in 2009. Depending upon the timing of survey, the entire extent of some insect and disease activity may not have been detected. In addition, most diseases cause gradual declines in tree health that are not typically detectable during aerial surveys. Intensity of damage is variable, thus not all trees within a mapped area are dead or defoliated. Caution should be used in interpreting these results due to the scale and subjective nature of aerial sketch mapping.

Arizona
 Surveys conducted July through September, 2010, by Steve Dudley, Ryan Hanavan, and Daniel Ryerson, Forest Health Office, Southwestern Region, US Forest Service; Aaron Green, Arizona State Land Department, Forestry Division.

New Mexico
 Surveys conducted June through September, 2010 by Ryan Hanavan, Daniel Ryerson and Crystal Tischler, Forest Health Office, Southwestern Region, US Forest Service.

Significant Forest Mortality and Defoliation Detected through Aerial Survey

Region 3 - Southwestern Region - 2010

