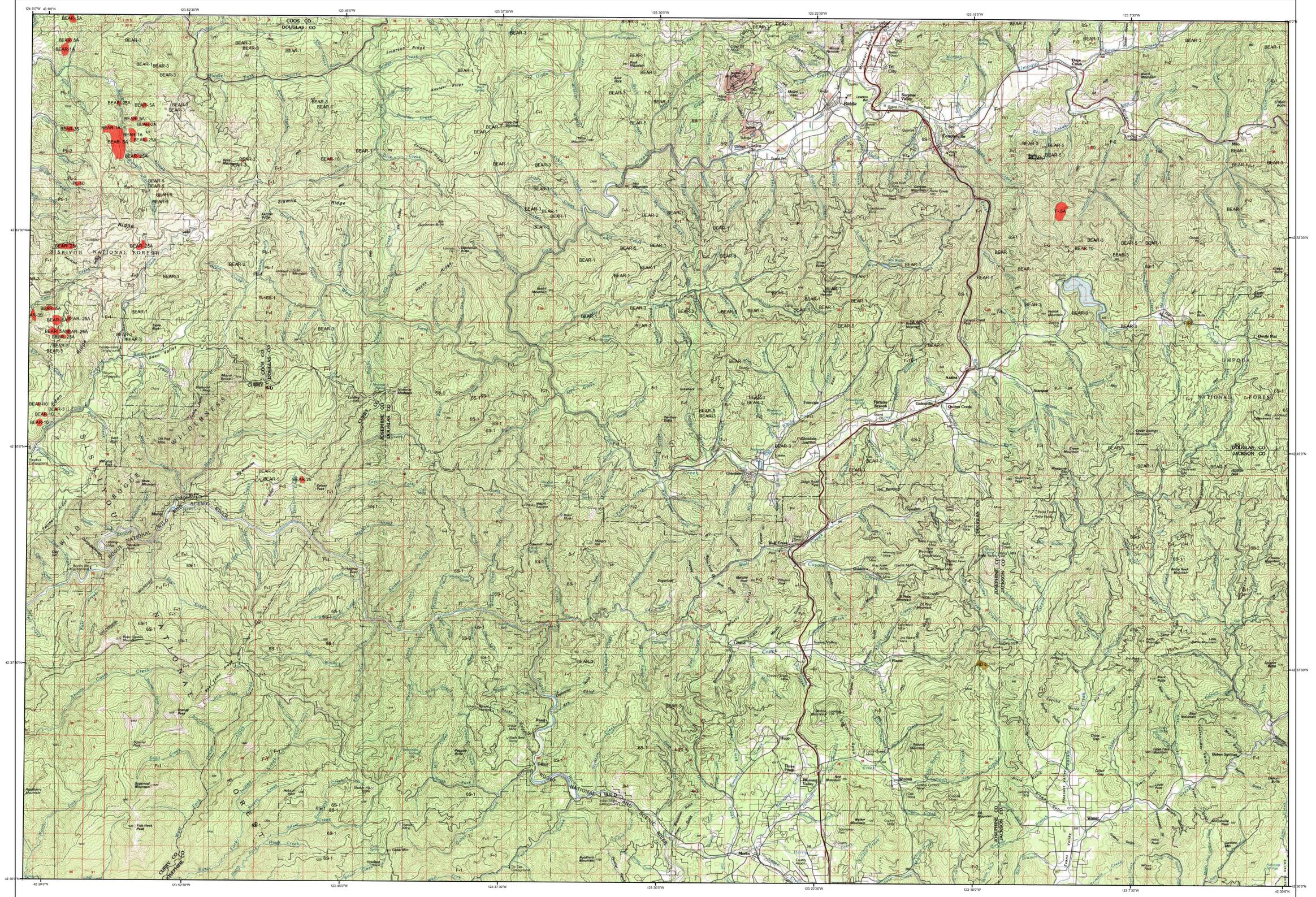


2009 Aerial Insect and Disease Survey

USGS 100K Quad: Canyonville - E142123; 2M



| Defoliators | | Mortality Agents | |
|-------------|-----------------------------|------------------|--------------------------------|
| Code | Damaging Agent | Code | Damaging Agent |
| AS | Spruce aphid | 1 | Douglas-fir beetle |
| SB | Western blackheaded budworm | 2 | Douglas-fir engraver |
| BM | Modoc budworm | 3 | Spruce beetle |
| BP | Sugar pine bark | 4 | Fir engraver |
| BS | Western spruce budworm | 5 | Western balsam bark beetle |
| BY | Bryum's bright/Opodromella | 6 | Mountain pine beetle |
| CH | Larch | 6J | Mountain pine beetle |
| HL | Western hemlock looper | 6K | Mountain pine beetle |
| LC | Green striped forest looper | 6L | Mountain pine beetle |
| LL | Larch looper | 6M | Mountain pine beetle |
| LS | Black pine needle scale | 6N | Mountain pine beetle |
| LD | Douglas-fir budmoth | 7 | lps spp. |
| ML | Larch budmoth | 8 | Western pine beetle |
| MN | Douglas-fir needle midge | 8B | Western pine beetle |
| MS | Spruce budmoth | 9 | Western pine beetle |
| ND | Needle miner | BEAR | Bear damage |
| NJ | Needle miner | BEAR | Flatheaded wood borer |
| NK | Needle miner | BEAR | Douglas-fir |
| NL | Needle miner | BEAR | Douglas-fir, ponderosa pine |
| NM | Needle miner | BEAR | Port Orford cedar |
| NP | Needle miner | BEAR | Port Orford cedar root disease |
| NS | Needle miner | BEAR | Road disease |
| NT | Needle miner | BEAR | Water damage |
| NW | Needle miner | BEAR | WATR |
| OL | Western oak looper | BEAR | WATR |
| PH | Pine butterfly | BEAR | WATR |
| PI | Pine needle cast | BEAR | WATR |
| PH | Phantom hemlock looper | BEAR | WATR |
| PM | Pandora moth | BEAR | WATR |
| PN | Pine needle/health miner | BEAR | WATR |
| PS | Pine needle scale | BEAR | WATR |
| RC | Needle cast | BEAR | WATR |
| S | Spider mite | BEAR | WATR |
| SA | Sawfly | BEAR | WATR |
| SD | Sawfly | BEAR | WATR |
| SE | Sawfly | BEAR | WATR |
| SH | Sawfly | BEAR | WATR |
| SK | Sawfly | BEAR | WATR |
| SL | Sawfly | BEAR | WATR |
| SM | Sawfly | BEAR | WATR |
| SN | Sawfly | BEAR | WATR |
| SW | Sawfly | BEAR | WATR |
| TA | Text caterpillar/ alder | BEAR | WATR |
| TC | Text caterpillar/ other | BEAR | WATR |
| TD | Douglas-fir tussock moth | BEAR | WATR |
| TS | Text caterpillar/ aspen | BEAR | WATR |

USGS 100K Quad: Canyonville - E142123; 2M
2009 Aerial Insect and Disease Detection Survey
Mapscale: 1:100,000
Date: February 5, 2010

Legend

- Defoliating Agents
- Mortality Agents
- Other Damage

The map base was created with TOPO! (Copyright 2001, National Geographic), available online at: www.ngmapstore.com

A data dictionary, digital copies of this map and ArcGIS insect and disease data are available at: www.fs.fed.us/r6/nr/fid/data.shtml

How the Aerial Surveys Are Conducted

Data represented on this map are based on trees visibly affected by forest insects and diseases detected and recorded during aerial survey flights conducted by the USDA Forest Service and the Oregon Department of Forestry. Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species; diagnose causal agents correctly; estimate intensity, delineate the extent of damage; and precisely record this information on a georeferenced, digital map. Air turbulence, cloud shadows, distance from aircraft, haze, smoke and observer experience can all affect the quality of the survey. These data summaries provide an estimate of conditions on the ground and may differ from estimates derived by other methods.

The aerial survey provides information on the current status for many causal agents, and is important when examining insect activity trends by comparing historical and current survey data over large areas.

Overview surveys are a 'snap shot' in time and therefore may not be timed to accurately capture the true extent or severity of a particular disturbance activity. Specially designed surveys with modified flight patterns and timing may be conducted to more accurately delineate the extent and severity of a particular disturbance agent. Special surveys, such as Swiss needle cast surveys, are conducted when resources are available to address situations of sufficient economic, political or environmental importance.

DIRECT ALL INQUIRIES TO:

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Forest Health Management
 2600 State Street
 Salem, Oregon 97310

-- OR --

USDA Forest Service, Region 6
Natural Resources
Forest Health Protection
 PO Box 3623
 Portland, Oregon 97208

DISCLAIMER: Forest Health Protection (FHP) and Oregon Department of Forestry (ODF) strive to maintain an accurate Aerial Detection Survey (ADS) Dataset, but due to the conditions under which the data are collected, FHP and ODF 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/monitoring/ads/accuracy.shtml>. Maps and data may be updated without notice. Please cite: USDA Forest Service, Forest Health Protection and Oregon Department of Forestry, "Forest Health Management" as the source of this data in maps and publications.