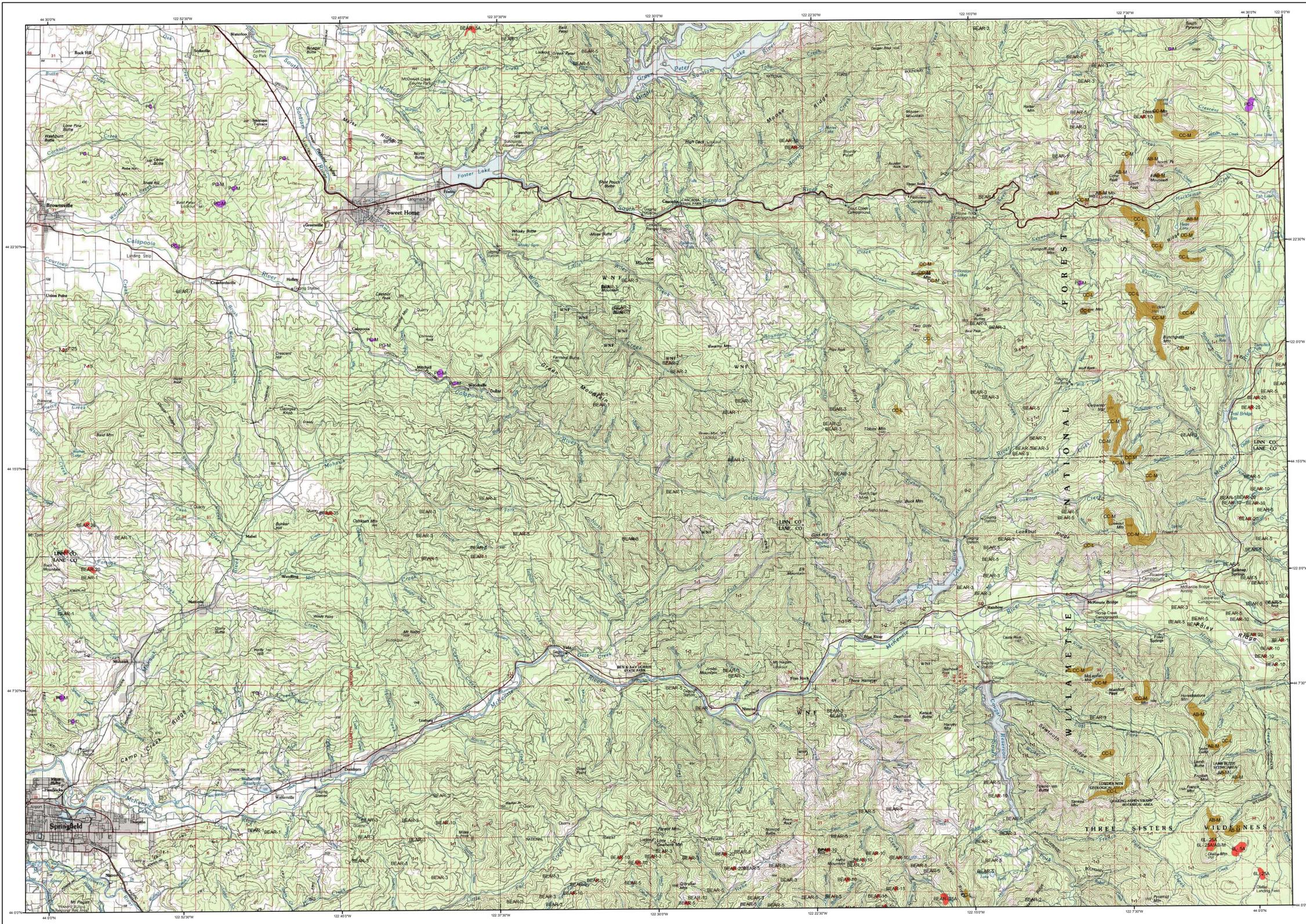


2009 Aerial Insect and Disease Survey

USGS 100K Quad: McKenzie River - A144122; 3J



Defoliators		Mortality Agents	
Code	Damaging Agent	Code	Damaging Agent
AS	Spruce aphid	1	Douglas fir beetle
BB	Western blackheaded budworm	2	Douglas fir engraver
BP	Sugar pine tortrix	3	Spruce beetle
BS	Western spruce budworm	4	Fir engraver
BY	Bynum's bright/lophodermella	5	Western balsam bark beetle
CH	Larch	6	Mountain pine beetle
HL	Western hemlock looper	6J	Jeffrey pine
LG	Green striped tent caterpillar	6L	Mountain pine beetle
LL	Larch looper	6M	Mountain pine beetle
LS	Black pine needle scale	6P	Mountain pine beetle
MD	Douglas fir budmoth	6S	Mountain pine beetle
ML	Larch budmoth	6W	Mountain pine beetle
MN	Douglas fir needle midge	7	lvs asp.
MS	Spruce budmoth	8	Western pine beetle
ND	Needle miner	8J	Western pine beetle
NJ	Needle miner	8L	Western pine beetle
NK	Needle miner	8M	Western pine beetle
NL	Needle miner	8P	Western pine beetle
NS	Needle miner	8S	Western pine beetle
NT	Needle miner	8W	Western pine beetle
NW	Needle miner	BEAR	Bear damage
OL	Western oak looper	BEAR-1	Flatheaded wood borer
OB	Pine butterfly	LW	Black stain root disease
OC	Pine needle cast	WD	Road disease
PH	Phantom hemlock looper	RAT	Water damage
PM	Pandora moth		
PN	Pine needle/bark miner		
PS	Pine needle scale		
RC	Needle cast		
S	Stipite mite		
SA	Sawfly		
SD	Sawfly		
SE	Sawfly		
SH	Sawfly		
SK	Sawfly		
SM	Sawfly		
SN	Sawfly		
SW	Sawfly		
TA	Tent caterpillar, alder		
TC	Tent caterpillar, other		
TD	Douglas fir bark beetle		
TS	Tent caterpillar, aspen		

USGS 100K Quad: McKenzie River - A144122; 3J
2009 Aerial Insect and Disease Detection Survey
Mapscale: 1:100,000
Date: February 2, 2010

Legend

- Defoliating Agents
- Mortality Agents
- Other Damage

The map base was created with TOPOI (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
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 Salem, Oregon 97310

-- OR --

USDA Forest Service, Region 6
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 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/operations/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.