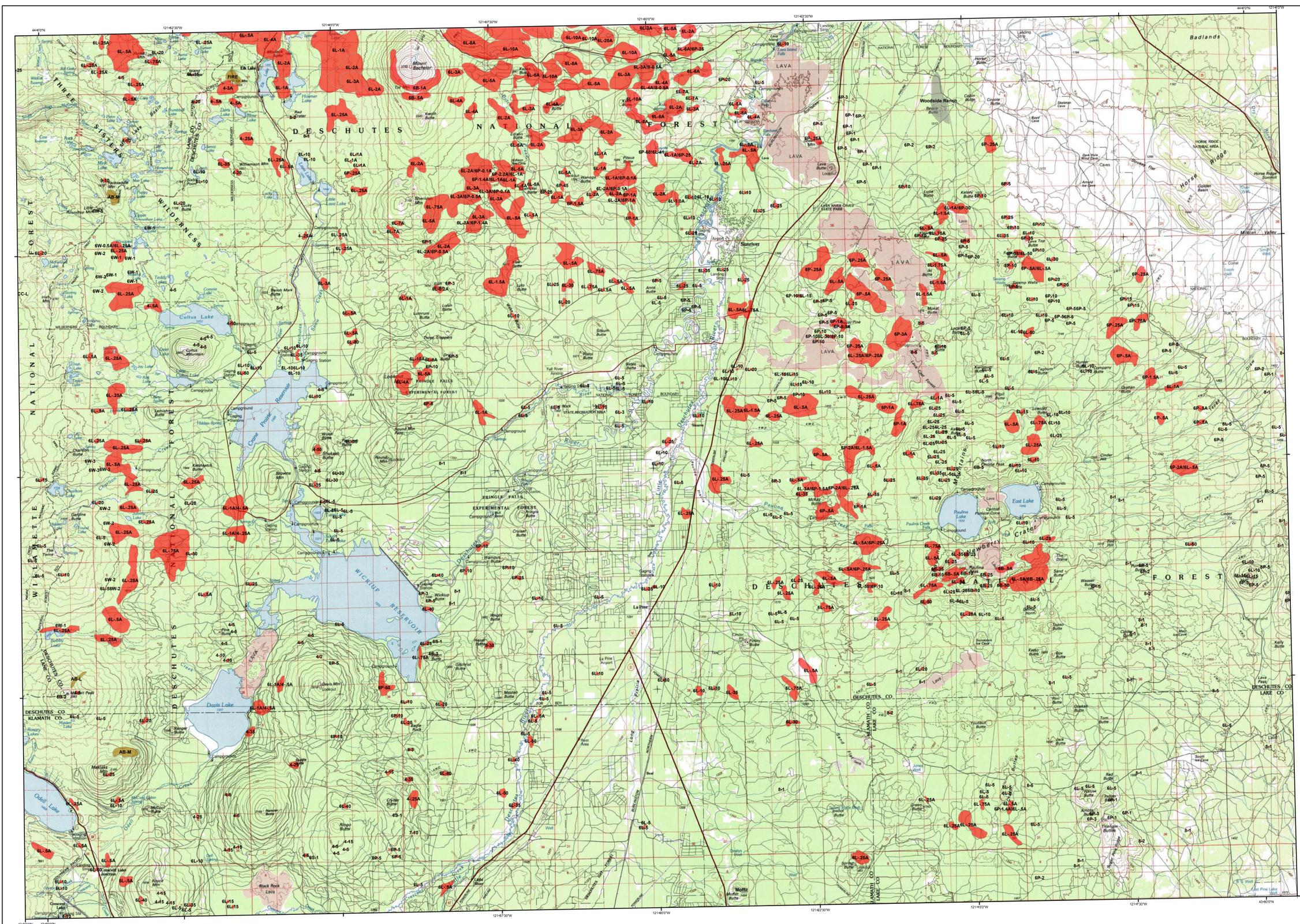


# 2007 Aerial Insect and Disease Survey

## USGS 100K Quad: LaPine - E143121; 4K



Defoliators		Mortality Agents	
Code	Damaging Agent	Code	Damaging Agent
AS	Spruce aphid	1	Douglas fir beetle
BB	Western blackheaded budworm	2	Douglas fir engraver
BM	Moose budworm	3	Spruce beetle
BP	Sugar pine tortrix	4	True fir
BS	Western spruce budworm	5	Western balsam bark beetle
BY	Blyth's bright Lophodermella	6	Mountain pine beetle
CH	Larch	7	Mountain pine beetle
CL	Western hemlock looper	8	Mountain pine beetle
LL	Green striped forest looper	9	Mountain pine beetle
LS	Black pine needle scale	10	Mountain pine beetle
LD	Larch looper	11	Mountain pine beetle
ML	Larch budmoth	12	Mountain pine beetle
MM	Douglas fir needle midge	13	Mountain pine beetle
MS	Spruce budmoth	14	Mountain pine beetle
NJ	Needle miner	15	Mountain pine beetle
NK	Needle miner	16	Mountain pine beetle
NL	Needle miner	17	Mountain pine beetle
NP	Needle miner	18	Mountain pine beetle
NS	Needle miner	19	Mountain pine beetle
NT	Needle miner	20	Mountain pine beetle
NW	Needle miner	21	Mountain pine beetle
CL	Western oak looper	22	Mountain pine beetle
PC	Pine butterfly	23	Mountain pine beetle
PH	Pine needle cast	24	Mountain pine beetle
PI	Phantom hemlock looper	25	Mountain pine beetle
PN	Pine needle scale	26	Mountain pine beetle
PS	Pine needle scale	27	Mountain pine beetle
RC	Needle cast	28	Mountain pine beetle
SD	Sawfly	29	Mountain pine beetle
SH	Sawfly	30	Mountain pine beetle
SI	Sawfly	31	Mountain pine beetle
SM	Sawfly	32	Mountain pine beetle
SN	Sawfly	33	Mountain pine beetle
SO	Sawfly	34	Mountain pine beetle
TA	Tent caterpillar	35	Mountain pine beetle
TC	Tent caterpillar	36	Mountain pine beetle
TD	Tent caterpillar	37	Mountain pine beetle
TE	Tent caterpillar	38	Mountain pine beetle
TF	Tent caterpillar	39	Mountain pine beetle
TH	Tent caterpillar	40	Mountain pine beetle
TI	Tent caterpillar	41	Mountain pine beetle
TJ	Tent caterpillar	42	Mountain pine beetle
TK	Tent caterpillar	43	Mountain pine beetle
TL	Tent caterpillar	44	Mountain pine beetle
TM	Tent caterpillar	45	Mountain pine beetle
TN	Tent caterpillar	46	Mountain pine beetle
TO	Tent caterpillar	47	Mountain pine beetle
TP	Tent caterpillar	48	Mountain pine beetle
TQ	Tent caterpillar	49	Mountain pine beetle
TR	Tent caterpillar	50	Mountain pine beetle
TS	Tent caterpillar	51	Mountain pine beetle
TT	Tent caterpillar	52	Mountain pine beetle
TU	Tent caterpillar	53	Mountain pine beetle
TV	Tent caterpillar	54	Mountain pine beetle
TW	Tent caterpillar	55	Mountain pine beetle
TX	Tent caterpillar	56	Mountain pine beetle
TY	Tent caterpillar	57	Mountain pine beetle
TZ	Tent caterpillar	58	Mountain pine beetle
TA	Tent caterpillar	59	Mountain pine beetle
TB	Tent caterpillar	60	Mountain pine beetle
TC	Tent caterpillar	61	Mountain pine beetle
TD	Tent caterpillar	62	Mountain pine beetle
TE	Tent caterpillar	63	Mountain pine beetle
TF	Tent caterpillar	64	Mountain pine beetle
TF	Tent caterpillar	65	Mountain pine beetle
TF	Tent caterpillar	66	Mountain pine beetle
TF	Tent caterpillar	67	Mountain pine beetle
TF	Tent caterpillar	68	Mountain pine beetle
TF	Tent caterpillar	69	Mountain pine beetle
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TF	Tent caterpillar	71	Mountain pine beetle
TF	Tent caterpillar	72	Mountain pine beetle
TF	Tent caterpillar	73	Mountain pine beetle
TF	Tent caterpillar	74	Mountain pine beetle
TF	Tent caterpillar	75	Mountain pine beetle
TF	Tent caterpillar	76	Mountain pine beetle
TF	Tent caterpillar	77	Mountain pine beetle
TF	Tent caterpillar	78	Mountain pine beetle
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TF	Tent caterpillar	82	Mountain pine beetle
TF	Tent caterpillar	83	Mountain pine beetle
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TF	Tent caterpillar	86	Mountain pine beetle
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TF	Tent caterpillar	89	Mountain pine beetle
TF	Tent caterpillar	90	Mountain pine beetle
TF	Tent caterpillar	91	Mountain pine beetle
TF	Tent caterpillar	92	Mountain pine beetle
TF	Tent caterpillar	93	Mountain pine beetle
TF	Tent caterpillar	94	Mountain pine beetle
TF	Tent caterpillar	95	Mountain pine beetle
TF	Tent caterpillar	96	Mountain pine beetle
TF	Tent caterpillar	97	Mountain pine beetle
TF	Tent caterpillar	98	Mountain pine beetle
TF	Tent caterpillar	99	Mountain pine beetle
TF	Tent caterpillar	100	Mountain pine beetle

USGS 100K Quad: LaPine - E143121; 4K  
 2007 Aerial Insect and Disease Detection Survey  
 Mapscale: 1:100,000  
 Date: November 27, 2007

### Legend

- Defoliating Agents
- Mortality Agents
- Other Damage
- 2007 Large Fires

Source: Northwest Coordination Center

The map base was created with TOPOI (Copyright 2001, National Geographic), available online at: [www.ngmapstore.com](http://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/rid/data.shtml](http://www.fs.fed.us/r6/nr/rid/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 agent. 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**  
 The insect and disease data presented should only be used as an indicator of insect and disease activity, and should be ground-checked for precise location, extent, severity and causal agent. Color coded polygons show locations where trees were recently killed or defoliated. Intensity of damage is variable and not all trees within coded polygons are dead or defoliated. The cooperators reserve the right to correct, update, modify or replace GIS products without notice. Using this map for purposes other than those for which it was intended may yield inaccurate or misleading results.