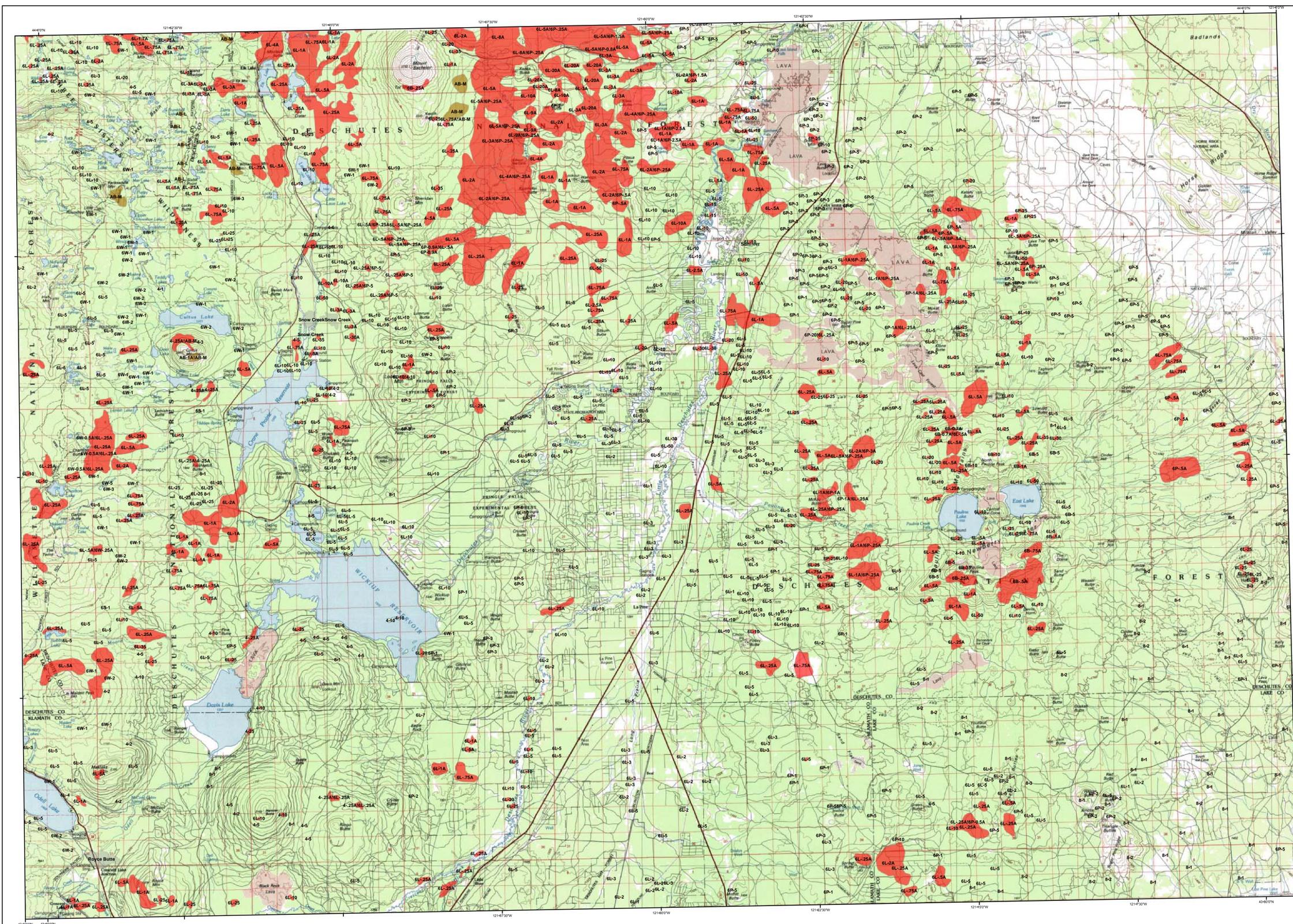


2008 Aerial Insect and Disease Survey

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	Fire engraver
BS	Western spruce budworm	5	Western balsam bark beetle
BY	Blyth's bright lophodermella	6	Mountain pine beetle
CH	Larch	7	Jeffrey pine
CL	Western hemlock looper	8	Mountain pine beetle
LG	Green striped forest looper	9	Pondosa pine
LL	Larch looper	10	Mountain pine beetle
LS	Black pine needle scale	11	Sugar pine
MD	Douglas fir budmoth	12	Pondosa pine
ML	Larch budmoth	13	Pondosa pine
MN	Douglas fir needle ridge	14	Western white pine
MS	Spruce budmoth	15	Pondosa pine
NJ	Needle miner	16	Douglas fir
NK	Needle miner	17	Douglas fir
NL	Needle miner	18	Douglas fir
NP	Needle miner	19	Douglas fir
NT	Needle miner	20	Douglas fir
NW	Needle miner	21	Douglas fir
OB	Western oak looper	22	Douglas fir
PC	Pine needle cast	23	Douglas fir
PH	Phantom hemlock looper	24	Douglas fir
PN	Pine needle scale	25	Douglas fir
PS	Pine needle scale	26	Douglas fir
RC	Needle cast	27	Douglas fir
S	Spruce aphid	28	Douglas fir
SD	Sawfly	29	Douglas fir
SF	Sawfly	30	Douglas fir
SK	Sawfly	31	Douglas fir
SM	Sawfly	32	Douglas fir
SN	Sawfly	33	Douglas fir
SP	Sawfly	34	Douglas fir
TA	Tent caterpillar	35	Douglas fir
TC	Tent caterpillar	36	Douglas fir
TM	Tent caterpillar	37	Douglas fir
TS	Tent caterpillar	38	Douglas fir

USGS 100K Quad: LaPine - E143121; 4K
2008 Aerial Insect and Disease Detection Survey
Mapscale: 1:100,000
Date: November 19, 2008

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/nri/d/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******
 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.