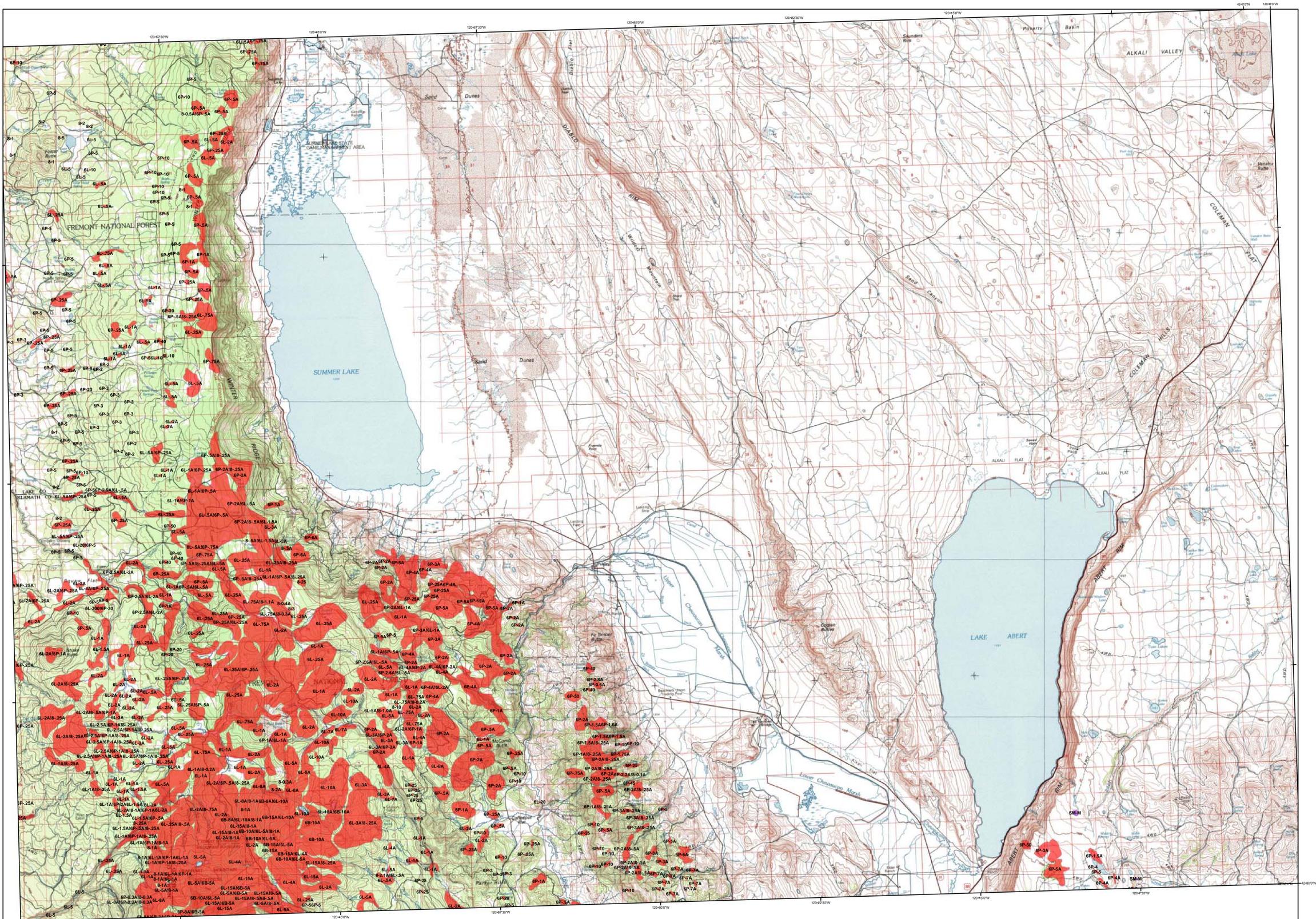


2008 Aerial Insect and Disease Survey

USGS 100K Quad: Lake Abert - E142120; 5M



Defoliators		Mortality Agents	
Code	Damaging Agent	Code	Damaging Agent
AS	Spruce aphid	1	Douglas-fir beetle
BS	Western blackheaded budworm	2	Douglas-fir engraver
BM	Motus budworm	3	Spruce beetle
BP	Sugar pine tortrix	4	Fir engraver
BS	Western spruce budworm	5	Western balsam bark beetle
BY	Bynum's bright/lophodermella	6B	Mountain pine beetle
CH	Larch	6J	Mountain pine beetle
HL	Western hemlock looper	6L	Mountain pine beetle
LG	Green striped forest looper	6P	Mountain pine beetle
LL	Larch looper	6S	Mountain pine beetle
LD	Douglas-fir budmoth	6W	Mountain white pine
MD	Larch budmoth	7	Western pine beetle
MS	Douglas-fir needle midge	8	Western pine beetle
NJ	Needle miner	8B	Western pine beetle
NK	Needle miner	8C	Western pine beetle
NL	Needle miner	8D	Western pine beetle
NP	Needle miner	8E	Western pine beetle
NS	Needle miner	8F	Western pine beetle
NT	Needle miner	8G	Western pine beetle
NW	Needle miner	8H	Western pine beetle
OL	Western oak looper	8I	Western pine beetle
PC	Pine needle cast	8J	Western pine beetle
PH	Phantom hemlock looper	8K	Western pine beetle
PM	Pandora moth	8L	Western pine beetle
PN	Pine needle/health miner	8M	Western pine beetle
PS	Pine needle scale	8N	Western pine beetle
RC	Needle cast	8O	Western pine beetle
RS	Spruce mite	8P	Western pine beetle
SD	Sawfly	8Q	Western pine beetle
SF	Sawfly	8R	Western pine beetle
SH	Sawfly	8S	Western pine beetle
SK	Sawfly	8T	Western pine beetle
SL	Sawfly	8U	Western pine beetle
SM	Sawfly	8V	Western pine beetle
SN	Swiss needle cast	8W	Western pine beetle
SP	Sawfly	8X	Western pine beetle
TA	Tent caterpillar, alder	8Y	Western pine beetle
TC	Tent caterpillar, other	8Z	Western pine beetle
TD	Douglas-fir tussock moth	9	Western pine beetle
TS	Tent caterpillar, aspen	10	Western pine beetle

USGS 100K Quad: Lake Abert - E142120; 5M
2008 Aerial Insect and Disease Detection Survey
Mapscale: 1:100,000
Date: November 20, 2008

Legend

- Defoliating Agents
- Mortality Agents
- Other Damage

Vicinity Map

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/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 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
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-- 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.