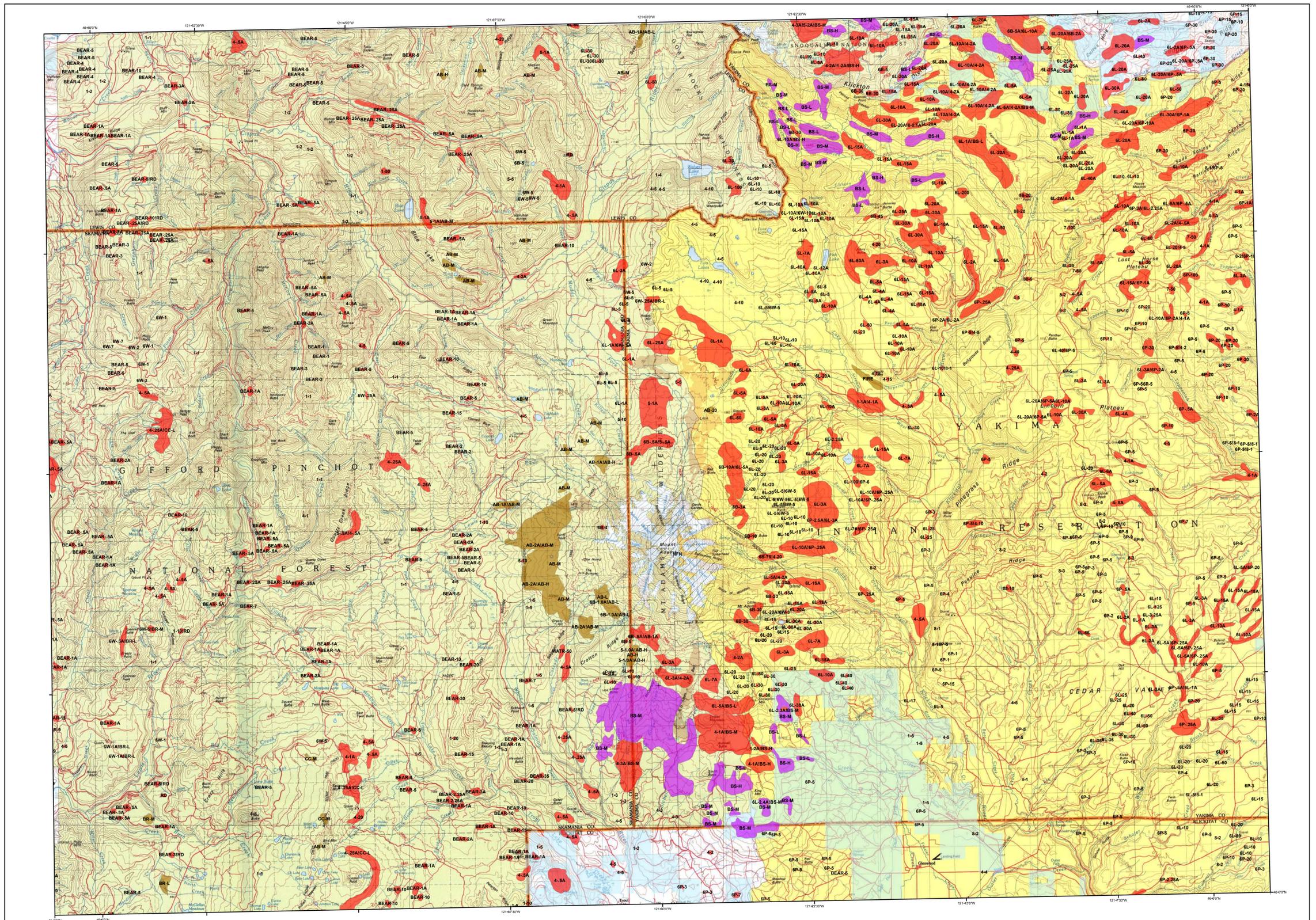


2007 Aerial Insect and Disease Survey Mt. Adams - USGS Quad E146121; 4F



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	Medic budworm	3	Spruce beetle
BP	Sugar pine tortrix	4	True fir
BS	Western spruce budworm	5	Western balsam bark beetle
BV	Burns's bright/lophodermella	6	Mountain pine beetle
CH	Larch	7	Knott's pine
HL	Western hemlock looper	8	Mountain pine beetle
LG	Green striped forest looper	9	Mountain pine beetle
LL	Larch looper	10	Mountain pine beetle
LS	Black pine needle scale	11	Mountain pine beetle
MD	Douglas fir budmoth	12	Mountain pine beetle
ML	Larch budmoth	13	Mountain pine beetle
MN	Douglas fir needle midge	14	Mountain pine beetle
MS	Spruce budmoth	15	Mountain pine beetle
ND	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
OL	Western white pine	22	Mountain pine beetle
OW	Western white pine	23	Mountain pine beetle
PB	Pine butterfly	24	Mountain pine beetle
PC	Pine needle cast	25	Mountain pine beetle
PH	Phantom hemlock looper	26	Mountain pine beetle
PI	Pine needle scale	27	Mountain pine beetle
PN	Pine needle scale	28	Mountain pine beetle
PS	Pine needle scale	29	Mountain pine beetle
RC	Needle cast	30	Mountain pine beetle
S	Spruce pine	31	Mountain pine beetle
SA	Sawfly	32	Mountain pine beetle
SD	Sawfly	33	Mountain pine beetle
SH	Sawfly	34	Mountain pine beetle
SK	Sawfly	35	Mountain pine beetle
SL	Sawfly	36	Mountain pine beetle
SM	Sawfly	37	Mountain pine beetle
SN	Sawfly	38	Mountain pine beetle
SP	Sawfly	39	Mountain pine beetle
SW	Sawfly	40	Mountain pine beetle
TA	Tent caterpillar	41	Mountain pine beetle
TC	Tent caterpillar	42	Mountain pine beetle
TM	Tent caterpillar	43	Mountain pine beetle
TS	Tent caterpillar	44	Mountain pine beetle

USGS 100K Quad - Mt. Adams; E146121; 4F
2007 Aerial Insect and Disease Detection Survey
Mapscale: 1:100,000
Date: November 27, 2007

Legend

	Defoliating Agents		Areas Not Flown
	Mortality Agents		
	Other Damage		
	WadNR Managed Lands		

Source: Washington Dept. of Natural Resources

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/rnr/rfd/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 Washington Department of Natural Resources. 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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 Olympia, WA 98504

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 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.