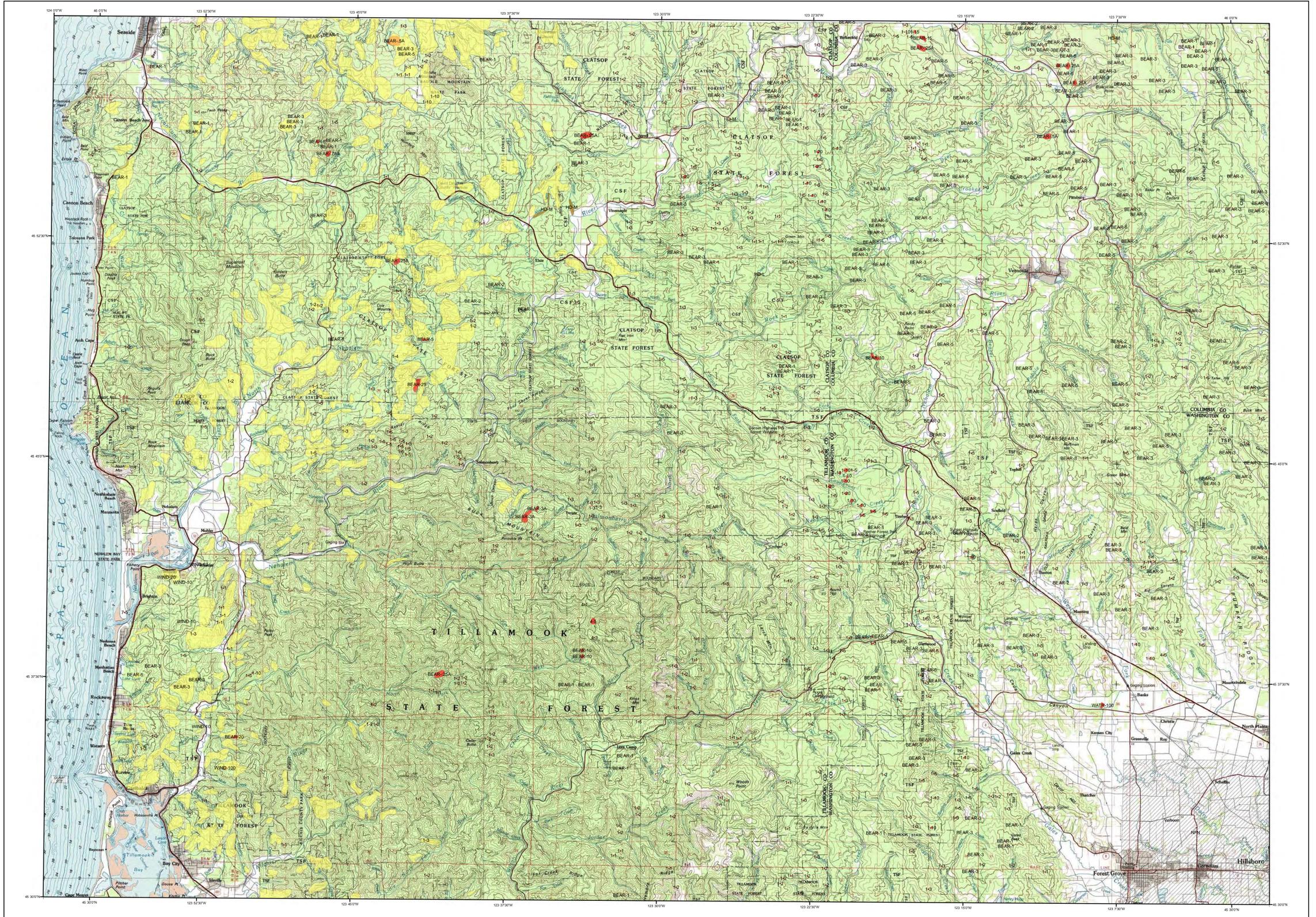


2010 Aerial Insect and Disease Survey Nehalem River; USGS 100K Quad E145123; 2G



Defoliators		Mortality Agents	
Code	Damaging Agent	Code	Damaging Agent
AS	Spruce aphid	1	Douglas-fir beetle
BB	Western blueheaded budworm	2	Douglas-fir engraver
BM	Modoc budworm	3	Spruce beetle
BS	Sugar pine tortrix	4	Fir engraver
BS	Western spruce budworm	5	Western balsam bark beetle
BY	Bynum's light/leucodermella	6J	Mountain pine beetle
CH	Larch casebearer	6K	Mountain pine beetle
HL	Western hemlock looper	6L	Mountain pine beetle
LC	Green spruce forest looper	6P	Mountain pine beetle
LL	Larch looper	6S	Mountain pine beetle
LS	Black pine leaf scale	6W	Western white pine
MD	Douglas-fir budmoth	7	Uk ipip
NL	Larch budmoth	8	Western pine beetle
MN	Douglas-fir needle midge	8B	Western pine beetle
NB	Spruce budmoth	9	Silver fir beetle
ND	Needle miner	BEAR	Bear damage
NJ	Needle miner		Flatheaded wood borer
NK	Needle miner		Douglas-fir, ponderosa pine
NL	Needle miner		Black stain root disease
MM	Needle miner		Purk Ortad cedar root disease
NP	Needle miner		Root rot
NS	Needle miner		Conifer
NT	Needle miner		All species
NW	Needle miner		Hardwoods
OL	Western oak looper		Conifer
PI	Pine butterfly		Conifer
PC	Pine needle cast		Conifer
PH	Phantom hemlock looper		Conifer
PM	Pine needle scale		Conifer
PN	Pine needle sheath miner		Conifer
PS	Pine needle scale		Conifer
RC	Needle scale		Conifer
SA	Sawfly		Conifer
SD	Sawfly		Conifer
SE	Sawfly		Conifer
SH	Sawfly		Conifer
SK	Sawfly		Conifer
SL	Sawfly		Conifer
SM	Sawfly		Conifer
SN	Sawfly		Conifer
SP	Sawfly		Conifer
SW	Sawfly		Conifer
TA	Tent caterpillar, aspen		Conifer
TC	Tent caterpillar, other		Conifer
TM	Douglas-fir tussock moth		Conifer
TS	Tent caterpillar, aspen		Conifer

USGS 100K Quad - Nehalem River - E145123; 2G
2010 Aerial Insect and Disease Detection Survey
Mapscale: 1:100,000
Date: December 27, 2010

Legend

- 2010 Special Swiss Needle Cast Survey
More information about this special survey and the related data is located here: <http://www.oregon.gov/ODF/privateforests/f/Maps.shtml>
- Defoliating Agents
- Mortality Agents
- Other Damage
- Areas Not Flown

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 Aerial 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:

Oregon Department of Forestry
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
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/qualityassurance.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.