CARIBOU - TARGHEE NATIONAL FOREST Targhee

Palisades and Teton Ranger Districts

Forest Health Protection
Annual Aerial Detection Survey
2016

1:126,720

0 0.75 1.5 3 4.5 6 Miles

N W E S

Map Location

Idaho
Wyoming
Nevada
Utah
California

LEGEND

Affected Area Agents

- Bark Beetles
  - Used with dual agent types
- Defoliators (Light / Not Rated – Heavy)
  - Used with dual agent types
- Disease (Light / Not Rated – Heavy)
  - Used with dual agent types
- Other (Light / Not Rated – Heavy)

- National Forest Bdy.
- County Bdy.
- State Line

Area Flown

Area Not Flown

BARK BEETLES

Code	Agent:
1	Douglas-fir beetle
2	Engelmann spruce beetle
3	Pine engraver (PP, WP)
4	Mountain pine beetle (WP)
5	Mountain pine beetle (PP)
6	Mountain pine beetle (LPP)
7	Mountain pine beetle (WBP)
8	Western pine beetle
9	Fir engraver beetle
11	Subalpine fir mortality
13	Pine engraver (LPP)
14	Mountain pine beetle (Limber)
15	MPB (high elevation 5-needle pines)
16	Mountain pine beetle (Jeffery pine)
88	Pinyon Ips

DEFOLIATORS

Code	Agent:
17	Balsam woolly adelgid
20	Western spruce budworm
22	Douglas-fir tussock moth
23	Pine butterfly
39	Unidentified defoliator
89	Scale insects
90	Satin moth

DISEASE AGENTS

Code	Agent:
50	White pine blister rust
53	Aspen foliage disease
57	Rhabdocline (DF)
69	Larch needle cast
85	Unknown rust

OTHER AGENTS

Code	Agent:
66	Frost
70	Fire
72	Windthrow
73	Flooding
75	Decline
76	Drought
79	Dieback
95	Unknown Mortality

Tree Range

Code	# Trees
1	1
2	2 - 5
3	6 - 15
4	16 - 30
5	>30

% Stand Affected

Code	% Affected
(1)	1 - 3
(2)	4 - 10
(3)	11 - 29
(4)	30 - 50
(5)	>50

SPECIES CODES

Code	Species
Asp, ASP	Aspen
DF	Douglas-fir
JU	Juniper
LP, LPP	Lodgepole pine
PP	Ponderosa pine
PY	Pinyon pine
SAF	Subalpine fir
SPY	Single leaf pinyon
UCO	Unknown conifer
UHW	Unknown hardwood

SPECIES CODES

Code	Species
WB	Whitebark pine
WIL	Willow
WL	Western Larch
WP	Western white pine
WRC	Western red cedar

MISCELLANEOUS

Code	Species
NH	No host
TpK	Top kill

CODING SYSTEM

In 2016 Forest Health Protection began using a new coding scheme to document observable activity. For small spots, tree ranges were used to indicate the amount of activity. For larger areas delineated with polygons, the activity was documented as a range of the percent of stand affected.

The number before the dash is the numeric code for the causal agent, and if needed, followed by an 'L' or 'H' to indicate the severity of the activity. The number following the dash is the code representing the range of activity. For small points of data, the number represents the tree range. For larger polygons the number represents the percent (%) of the stand affeced and will be enclosed by parenthesis '( )'. If needed a species code or additional notation is added.
Examples: **Code 5-2** represents mountain pine beetle in Ponderosa pine of 2-5 trees.
Code 20H-(4) represents heavy defoliation of western spruce budworm affecting 30-50% of the delineated polygon.

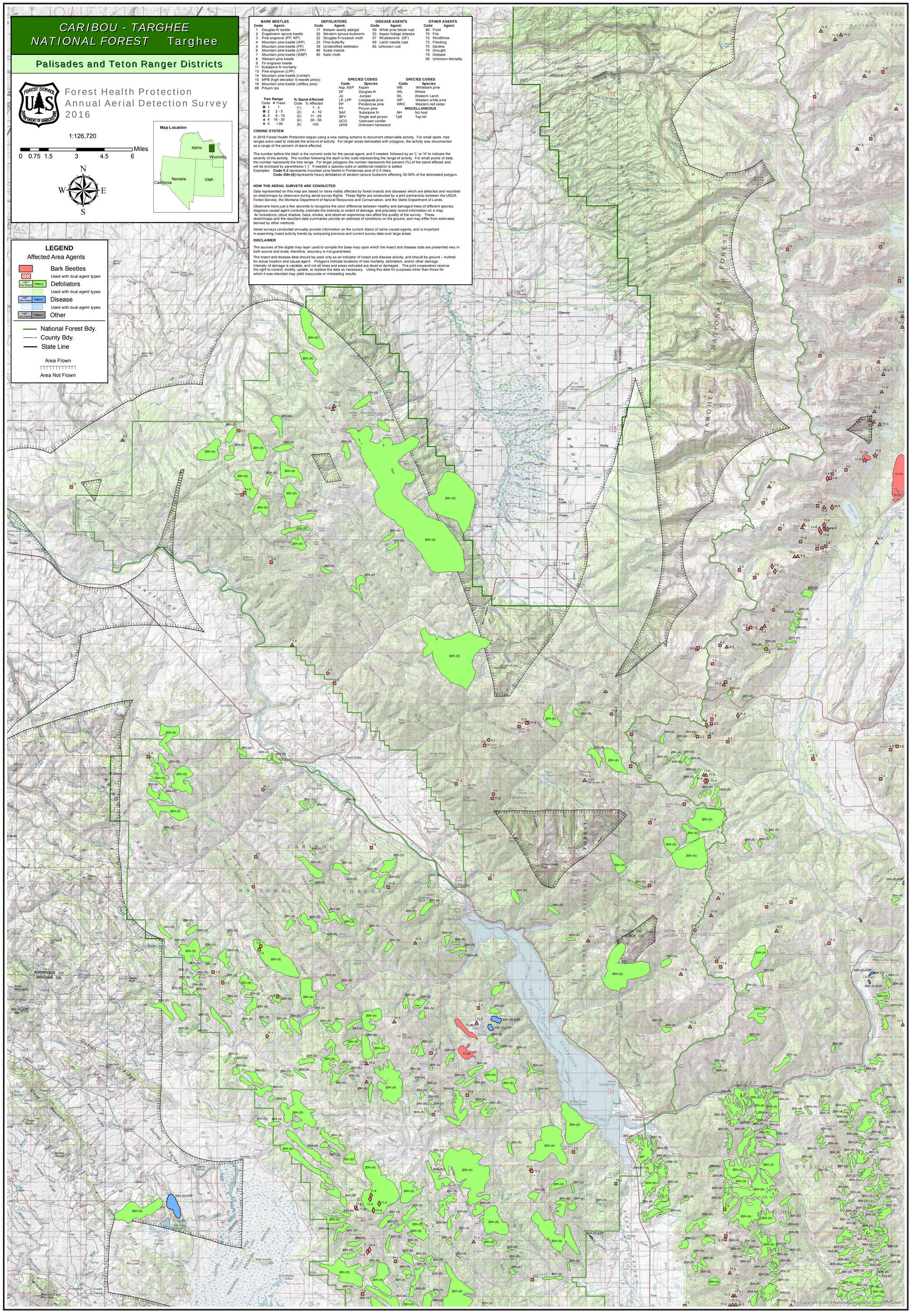
HOW THE AERIAL SURVEYS ARE CONDUCTED

Data represented on this map are based on trees visibly affected by forest insects and diseases which are detected and recorded on sketchmaps by observers during aerial survey flights. These flights are conducted by a joint partnership between the USDA Forest Service, the Montana Department of Natural Resources and Conservation, and the Idaho Department of Lands.

Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species, diagnose causal agent correctly, estimate the intensity or extent of damage, and precisely record information on a map. Air turbulence, cloud shadow, haze, smoke, and observer experience can affect the quality of the survey. These sketchmaps and the resultant data summaries provide an estimate of conditions on the ground, and may differ from estimates derived by other methods.

Aerial surveys conducted annually provide information on the current status of some causal agents, and is important in examining insect activity trends by comparing previous and current survey data over large areas.

DISCLAIMER

The sources of the digital map layer used to compile the base map upon which the insect and disease data are presented vary in both source and scale, therefore, accuracy is not guaranteed.

The insect and disease data should be used only as an indicator of insect and disease activity, and should be ground – truthed for actual location and causal agent. Polygons indicate locations of tree mortality, defoliation, and/or other damage. Intensity of damage is variable, and not all trees and areas indicated are dead or damaged. The joint cooperators reserve the right to correct, modify, update, or replace the data as necessary. Using this data for purposes other than those for which it was intended may yield inaccurate or misleading results.