



LEGEND

Affected Area Agents

- █ Bark Beetles
- ▨ Used with dual agent types
- █ Defoliators
- ▨ Used with dual agent types
- █ Disease
- ▨ Used with dual agent types
- █ Other
- ▨ Used with dual agent types

Reporting Area Bdy. —

County Bdy. - - -

Land Manager

- █ Private
- █ USFS
- █ BLM
- █ State
- █ Other Federal
- █ Tribal

Area Flow

- █ Area Not Flown

GLACIER NATIONAL PARK REPORTING AREA

Forest Health Protection
Annual Aerial Detection Survey
2015

1:126,720

0 2 4 Miles

Map Location

MONTANA
NORTH DAKOTA
SOUTH DAKOTA
IDaho WYOMING

Logos: U.S. Forest Service, U.S. Department of the Interior, DNR

Damage Agents Identified during the 2015 ADS Survey

Code	Bark Beetles	Code	Defoliator Agents	Code	Disease Agents	Code	Other Agents
1	Black pine beetle	17	Western spruce budworm	40	Western spruce budworm	60	Water injury
2	Engelmann spruce beetle	20	Western spruce budworm	50	White pine blister rust	67	Fire
3	Pine engraver	21	Western spruce budworm	60	Larval needle miner	70	Lightning
4	Mountain pine beetle (MPB)	22	Western spruce budworm	65	Larval needle miner	72	Windthrow
5	Mountain pine beetle (MPB)	23	Western spruce budworm	70	Larval needle miner	75	Ice damage
6	Mountain pine beetle (MPB)	24	Western spruce budworm	75	Larval needle miner	78	Deer
7	Mountain pine beetle (MPB)	25	Western spruce budworm	80	Larval needle miner	80	Other dead
8	Western spruce budworm	26	Western spruce budworm	85	Larval needle miner	85	
9	Fire engraver	27	Western spruce budworm	90	Larval needle miner	90	
10	Fire engraver (G.V.)	28	Western spruce budworm	95	Larval needle miner	95	
11	Subgenus IV resinolyticus	29	Western spruce budworm	100	Larval needle miner	100	
12	High elevation 5-needle species	30	Western spruce budworm				

COODING SYSTEM

The number below the dash is the number of dead trees in the origin. The number after the dash is the number of dead trees in the origin. The number after the dash is the number of dead trees in the origin. The number after the dash is the number of dead trees in the origin.

HOW THE AERIAL SURVEYS ARE CONDUCTED

Observers have just a few seconds to recognize the color differences between healthy and damaged trees of different species. Observers have just a few seconds to recognize the color differences between healthy and damaged trees of different species. Observers have just a few seconds to recognize the color differences between healthy and damaged trees of different species.

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 damage. Prognosis indicates location of tree mortality, and does not indicate the intensity of damage or whether, and not all trees and areas included are dead or damaged. The user agrees to assume the right to correct, modify, update, or replace the data as necessary. Using the data for purposes other than those for which it was intended may yield inaccurate or misleading results.