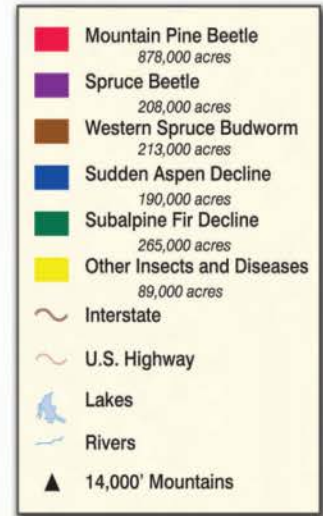
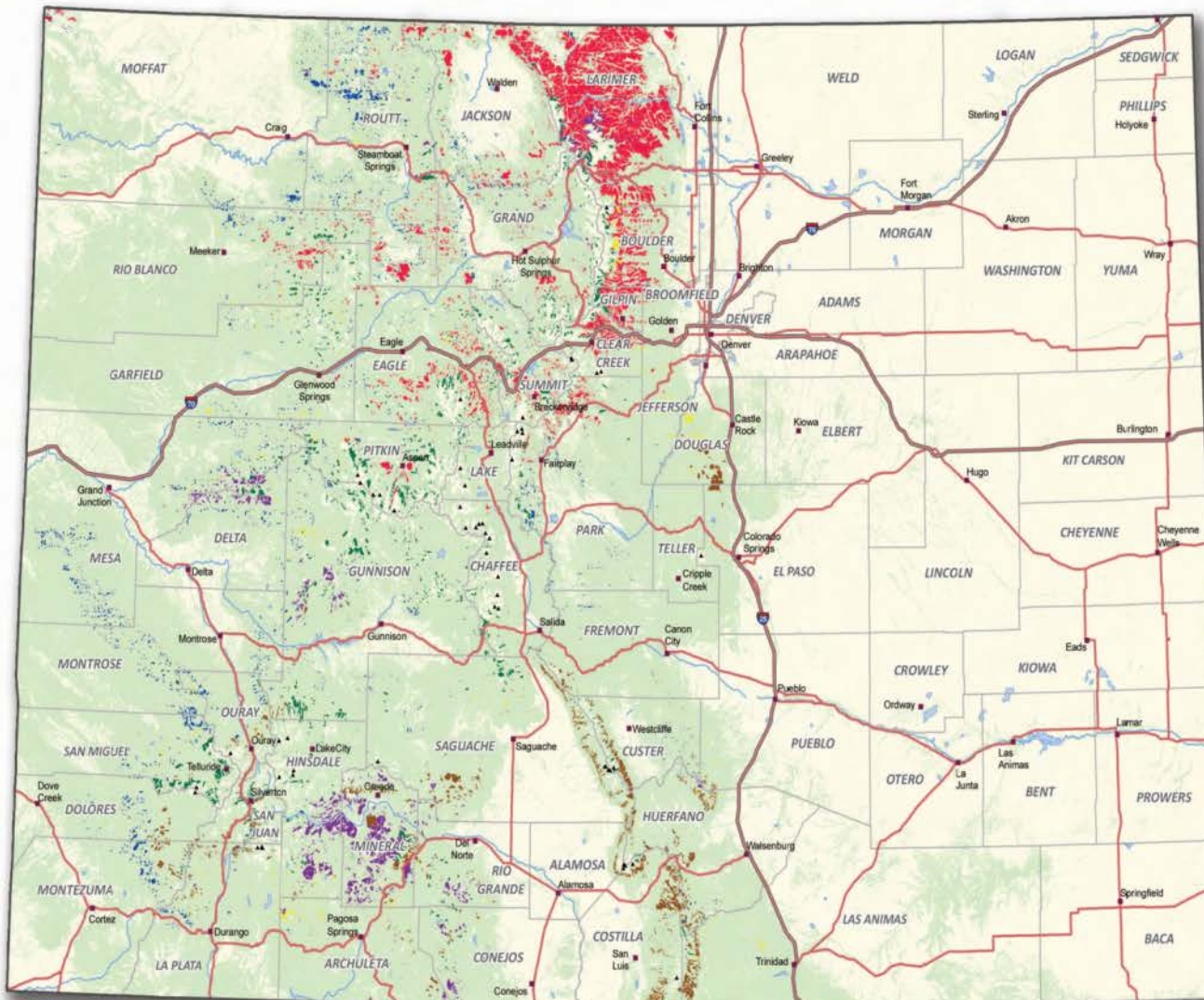


Common Insects and Disease in Woodmoor Mountain Area



2010 Insect and Disease Activity in Colorado Forests



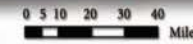
Aerial Survey Data

Due to the nature of aerial surveys, the data on this map will only provide rough estimates of location, intensity and the resulting trend information for agents detectable from the air. Many of the most destructive diseases are not represented on the map because these agents are not detectable from aerial surveys. The data presented on this map should only be used as a partial indicator of insect and disease activity and should be validated on the ground for actual location and causal agent. Shaded areas show locations where tree mortality or defoliation were apparent from the air. Intensity of damage is variable and not all trees in shaded areas are dead or defoliated.

The insect and disease data represented on this map are available digitally from the U.S. Forest Service, Region Two Forest Health Management group. The cooperators reserve the right to correct, update, modify or replace GIS products. Using this map for purposes other than those for which it was intended may yield inaccurate or misleading results.



Map created January 2011
For more information:
www.coloradoforests.co





Western Spruce Budworm

- Defoliator-eats new growth
- Adults are moths (late June-early Aug)
- April-June larvae enter bud and feed
- Tops of trees can die, repeated defoliation can kill entire tree



Western Spruce Budworm

- Limited management options
 - Usually controlled by parasites and limited food supply, late spring freezes
 - Reduce tree densities
 - Spraying (BT, mid-June): high value trees



L. Livingston, IDPL,
Bugwood.org



Dwarf Mistletoe

- Parasitic plant
- Spreads by “shooting” seeds in August
- Species specific-Douglas-fir, ponderosa pine
- Slowly robs the tree of food and water



W. Ciesla, FHMI, Bugwood.org



USFS R2, Bugwood.org



T. Hinds, USFS, Bugwood.org

Dwarf Mistletoe

- More susceptible to ips and mountain pine beetle attacks
- Management:
 - Difficult to eradicate
 - Pruning and removal
 - Buffer strips
 - Plant non-susceptible species
 - Ethephon spray: limited success



Ips Beetle

- Small (1/8"), reddish brown
- Attack stressed pine trees
 - Competition
 - Drought
 - Storm damage
 - New transplants
- Fly multiple times a year
- Breed in slash



L. Livingston, IDPL,
Bugwood.org

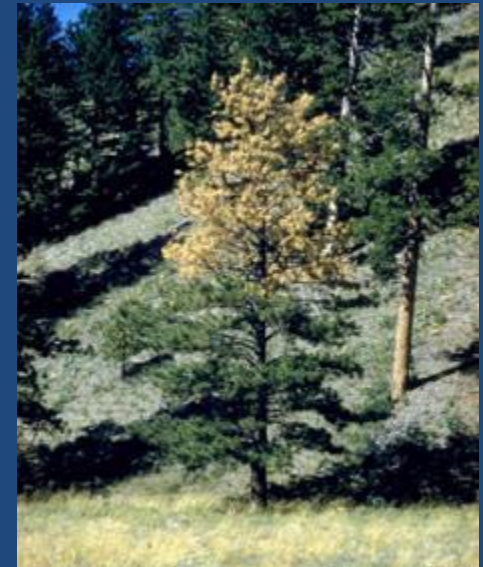


Ips Beetle

- Signs/Symptoms:
 - Boring dust
 - Portions of tree brown
 - Round entry/exit holes
- Management
 - Promote healthy trees (thin)
 - Dispose of slash within a month
 - Treat actively infested trees
 - Preventative spray: transplants, high value trees



K. Billings, TFS, Bugwood.org



S. Kegley, USFS, Bugwood.org

Mountain Pine Beetle (MPB)

- Small (1/4"), black
- Attack mature pines (6" and greater)
- Fly mid-July through mid-September
- Kill tree within a year of attack



Mountain Pine Beetle

- Signs/Symptoms:
 - Pitch tubes, boring dust
 - Round entry/exit holes
 - All needles on tree are turning



Mountain Pine Beetle

- Management
 - Promote healthy trees (thin)
 - Treat actively infested trees
 - Preventative spray: high value trees (May)



Douglas-fir Beetle

- Attack large diameter trees
- Fly mid-late spring
- Signs/Symptoms
 - Red boring dust in bark cracks
 - Discolored foliage
 - Clear pitch streams on trunk
- Primarily around Hayman burn area
- Management
 - Promote healthy trees (thin)
 - Treat actively infested trees



W. Ciesla, FHMI, Bugwood.org



D. Page, BLM Bugwood.org

Current Situation

- Spruce Budworm: Population decreasing, heavy defoliation
- Dwarf Mistletoe: Widespread throughout area in Douglas-fir and ponderosa pine
- Ips Beetle: Endemic levels, may see increase with drought conditions, unhealthy forests
- Mountain Pine Beetle: Endemic levels in Douglas County. Epidemic in Larimer, Boulder County in lodgepole/ponderosa pine forest type
- Douglas-fir Beetle: Population increased in 2010 in Rampart Range Road area

Landowner Actions

- Actively manage forest
 - Thin trees to improve forest health, reduce fire hazard
 - Monitor trees for signs/symptoms of insect and disease
 - Treat actively infested trees



CWPP Revision and Grants

CWPP Revision

- Updated CSFS Minimum Standards in 2009
- Meeting with core team (Larkspur Fire, HOA, CSFS) and discuss needed updates/changes
- Update fuel treatment priorities, map locations, treatment methods
- Community input

Grants

- Most grant funding comes through CSFS
- Multiple funding sources with different requirements
 - Most funding requires CWPP-fuel treatments have to be identified in plan
 - Most are 50/50 cost-share; have had 60/40, max. cost per acre reimbursement
 - Meet CSFS standards for treatment: d-space, fuelbreaks, oak
- Few grants are available on a regular basis
- Notify communities when grants are available
 - Short turn around times for applications

Grants

- What makes a grant competitive?
 - Detailed scope of work with measureable treatments (# of d-spaces, acres)
 - Multiple landowners, large acreage
 - Multiple cooperators/partners involved
 - HOA administers project (pass thru)

QUESTIONS