

# 2011 Aerial Forest Health Survey – Colorado

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## Weekly Report 2 – 9-16 July

The following is a summary of aerial observations made during the week of 9 July as part of the 2011 aerial forest health survey of Colorado.

### **Areas Surveyed**

We moved our base of operations from Alamosa to Gunnison and flew the following areas:

1. Upper San Miguel River Basin including Telluride and Ophir (RA 38)
2. North slopes of the San Juan Range from Ouray east to Slumgullion Pass (RA 37)
3. High elevation forests from McClure Pass east to Independence Pass including the Maroon Bells and Aspen (RA 24)
4. Southern slopes of the San Juan Range from Wolf Creek Pass west to the Animas and Dolores River Basins (CO RAs 41 & 42).
5. Gunnison to Monarch Pass, north to the Taylor River Basin and southern slopes of the Maroon Bells and west to Crested Butte (RA 27).

### **Defoliators**

Most of the Douglas fir type in the upper Vallecito Creek, Animas River and Dolores River Basins (RAs 41 & 42) were defoliated by western spruce budworm. Other areas with scattered western spruce budworm defoliation included the north facing slopes of Mt. Sneffels Range and the Upper San Miguel Basin.

## **Bark Beetles**

### *Douglas- fir Beetle*

Infestations were found in the following areas:

1. North of Ouray (RAs 37 & 38), where large infestations that appear to have been underway for several years were detected in the Corbert, Dexter, Cutler, Cedar and Cow Creek Basins.
2. Several tributaries of the Lake Fork of the Gunnison River north of Lake City.
3. Tributaries of the Crystal River, from Marble east to the lower slopes of Mt. Sophris (RA 24) including Kline, Hawk, East, Avalanche and Bulldog Creeks.
4. Most of the lower portions of drainages on the southern slopes of the San Juan Range (RA 44).

Infestations occurred in mature stands of Douglas-fir, often on steep slopes. Many of these infestations have been underway for several years as evidenced by the presence of red-brown or gray crowns adjacent to new faders. The number of new faders ranged from 5 to 100 trees per infestation.

### *Mountain Pine Beetle*

Infestations continued at relatively low levels in lodgepole pine stands on the slopes of Smuggler Mountain and the Snowmass Ski Area near Aspen (RA 24).

### *Spruce Beetle*

The massive spruce beetle epidemic, that has been underway for several years in the Weminuchee Wilderness and Upper Rio Grande Basin, expanded northward during 2010-11. Heavy mortality of Engelmann spruce now occurs throughout much of the northern half of the Rio Grande Basin (RA 30). Tree mortality was observed as far north as Spring Creek Pass where infestations, estimated to be at a level of 25 new faders/acre, were mapped. Much of the mature spruce component has now been killed over large portions of the Weminuchee Wilderness (RAs 30 and 44). However, small pockets of new faders were mapped throughout the area. Observations of particular interest were the continued occurrence of faders in young Engelmann spruce stands and in krumholz stands at the edge of timberline. A large area of recent attacks (faders) was mapped in the Los Pinos River Basin near the western edge of the Weminuchee Wilderness (RA 42). Spruce forests in the vicinity of Slumgullion Pass, Lake City,

Lake San Cristobal and Henson Creek (RA 37) still appear to be relatively free of spruce beetle attacks.

### **Other Observations**

A small group of trees, believed to be soft or white pines, with top kill and branch flagging was detected on the south side of Owl Creek Pass (RA 37). Cause of the damage is unknown but is believed to be the result of feeding by porcupines.