## Colorado Aerial Forest Health Survey - 2014 Weekly Status Report -3, 13-18 July William M. Ciesla

Forest Health Management International, Fort Collins, CO

This is the third of five weekly status reports on my role in the 2014 Colorado Aerial Forest Health Survey. We were based in Cañon City and flew forested areas in the Wet Mountains, Waugh Mountain, South Park and the Pike's Peak area. Due to heavy monsoonal rains and low clouds, we were only able to fly 7.8 hours. However, I did manage to spend a day on the ground in the Wet Mountains and got a feel for insect and disease activities in that area.

Spruce beetle infestations are continuing in the Greenhorn Peak area of the Wet Mountains where populations have been building up since the windthrow event of 2007.

Fir engraver beetle reached epidemic proportions from Chipeta Park east to Manitou Springs and south along the lower slopes of Cheyenne Mountain. Infestations declined, on the other hand, in the Four Mile and Eight Mile (Phantom Canyon) Basins. Activity also increased significantly along the entire eastern slope of the Wet Mountains. Most areas of infestation were classified as "light" but a few stands suffered severe damage.

The extensive damage to pinyon pine caused by a combination of twig beetles and pinyon ips from the Royal Gorge east to the Four Mile and Eight Mile Creek Basins and south along the eastern front of the Wet Mountains mapped in 2013 did not continue into 2014. Only occasional pinyon faders were seen.

Defoliation of aspen forests is continuing in the Wet Mountains. Most defoliation appears to be caused by large aspen tortrix. However one area of aspen defoliation north of Lake San Isabel was due to western tent caterpillar. Localized patches of aspen defoliation were also detected in the Waugh Mountain and Pike's Peak survey areas.

Defoliation by western spruce budworm was seen further north than in previous years. Defoliation occurred on the slopes of Raspberry Mountain near Divide and in several neighboring drainages. Defoliation also occurred in Douglas-fir stands from Chipeta Park east to Manitou Springs and south from Cheyenne Mountain to Turkey Creek. The outbreak in the Wet Mountains continued to expand northward and defoliation was mapped in the northernmost areas of host type. Heaviest damage occurred from South Hardscrabble Creek south. Areas of localized defoliation were also mapped on the north facing slopes of Waugh Mountain and in several drainages to the south of Waugh Mountain.

Five areas of complete defoliation of Douglas-fir and white fir, covering about 300 acres, believed to be caused by an outbreak of Douglas-fir tussock moth, were detected acres on the eastern slopes of Cheyenne Mountain. The largest area is located immediately east of the upper parking area of the NORAD facility.

A small area of windthrow, caused by a spring tornado, was mapped in open ponderosa pine stands near Lake George.

I will have a week of R&R and will continue flying during the week of 27 July.