Contact: Mike Blakeman, Public Affairs
(719) 852-6212

Fact Sheet
Results from the 2014 Forest Health Aerial Survey
Rio Grande National Forest

Spruce Beetle

The spruce beetle infestation grew approximately 78,000 acres on the Rio Grande National Forest (RGNF) in 2014 as detected by the forest health aerial survey. The beetles spread almost 100,000 acres last year. The rate of annual spread will continue to decline on the RGNF because most of the spruce-fir forests have been infested.

Aerial survey data is not precise; areas are grouped together which may include pockets of young trees that have not been infested. With that in mind, it is safe to say that more than 90% (more than 500,000 acres) of the spruce-fir forest of the RGNF has been infested with spruce beetle since the 2005. Total area on the RGNF covered by spruce-fir forest is about 560,000 acres.

The beetles have spread throughout the entire Rio Grande National Forest, but there are still some pockets that have not been infested. The beetles are not spreading in any particular direction on the forest, rather they are filling in the gaps.

Not all areas are infested equally. In some areas, all the spruce trees larger than 5 inches in diameter have been killed by spruce beetles. In other areas, there is a mixture of dead and living spruce trees of all sizes.

Subalpine fir and many of the young spruce will survive the infestation. These trees will provide the base population for creating the next spruce-fir forests. Additionally, seeds have been collected from live Engelmann spruce on the RGNF. These seeds are used to grow seedlings to be planted in the West Fork Complex burned areas and in sections of harvested areas where there is not adequate regeneration. More than 500 acres will be planted with spruce seedlings in 2015.

The RGNF continues to offer timber sales to salvage dead and dying spruce while the trees can still be used for commercial sawtimber. Currently there are 18 timber sales under contract. There are four active sales this winter salvaging beetle-killed spruce trees and one active green tree sale harvesting ponderosa and lodgepole pine trees. Fourteen of the 18 timber sales under contract are beetle-kill salvage sales.

In the Rocky Mountains, spruce beetles primarily infest Engelmann spruce, which grow in our high elevation forests. Spruce beetles can infest and have been found in some of the blue spruce on the RGNF.

Current research indicates that large wildland fires are no more likely to occur in spruce beetle-killed forests than in living spruce-fir forests. These types of fires generally only occur during severe dry periods at high elevations. The fine branches of dead spruce can carry crown fires (fire in the tops of the trees), as was observed in the West Fork and Papoose fires. It takes about 10 years for most of the small branches to break off of dead spruce at which time the dead trees will be less susceptible to carrying a crown fire.

Spruce trees may stay standing for several decades on some dry, protected sites, while they are expected to blow down more quickly in other areas. The increased number of trees blowing down is making it difficult to keep the trails clear on the RGNF.

Precautions for visitors to take include:

- Do not hike, ride or drive in beetle-killed forests on windy days.
- Do not park or set up a tent near tall trees in a beetle-killed forest.
- Carry a saw or an axe when driving on roads or trails that pass through beetle-killed forest – it is always a possibility a tree will fall that will block your way home while you are up the road or trail.

Tent Caterpillar

Tent caterpillar infestations are spreading throughout the Rio Grande National Forest. About 31,000 acres of aspen forests were defoliated by the caterpillars in 2014. There is approximately 261,000 acres of aspen forests on the RGNF.

Tent caterpillars feed on the leaves of aspen trees and other broad-leafed plants. When populations are large enough, entire stands of aspen trees may be defoliated. As long as the aspen have sugar reserves in their root systems, the trees will sprout new leaves following defoliation. The new leaves are generally smaller than those that grew in the spring, but they can still make for magnificent fall colors as was seen last year.

Individual and clones of aspen trees may begin to die after several years of repeated defoliation as the sugar reserves are used up or from other insects and diseases attacking the trees. In most cases of large tent caterpillar outbreaks, a virus eventually infests the caterpillars and the populations collapse. Timing of when that will occur is hard to predict.

For more information, contact Mike Blakeman, public affairs specialist, at 719-852-6212 or mblakeman@fs.fed.us