

## What is happening to our trees?



### Tips from the Posse

By Mark Rackay

I have always had a special attachment to trees. Not in the way that Clint Eastwood had in the movie "Paint Your Wagon," where he sang, "I talk to the trees." My relationship has always been more spiritual. I never talked to a tree and, quite frankly, never had a tree talk to me. That movie moment kind of destroyed my image of Eastwood as a tough guy.

Trees represent the backwoods, standing sentry to the great outdoors they watch over. I find personal freedom to hike amongst them, especially in fall when the color change would start. I cannot imagine what our mountains would be like without them, and hope I never find out. I have seen thousands of acres left lifeless by wildfire, and that is enough for me.

Our state tree is the Colorado blue spruce, or *Picea pungens* for you scientific types. It was adopted by the Colorado General Assembly way back on March 7, 1939. Sometimes called the silver spruce, it was the Utah state tree up until 2014, when it was replaced by the quaking aspen.

The Engelmann spruce has been fighting a battle since 1996 with the spruce beetle. Engelmann is similar to the blue spruce and in some instances has hybridized with blue spruce. While the spruce beetle primarily affects the Engelmann, it also can hit the Colorado spruce.

The spruce beetle is native to Colorado and is always present in spruce tree populations. Epidemics of the spruce beetle are part of the natural process of a forest but usually occur many years apart. The last infestation in Colorado was during the 1970s, but was not nearly as devastating as the current outbreak.

The beetle is dark brown or black in color and has wing covers. Their life span is about two years. The beetle is about a quarter-inch in length, or about the size of a grain of rice. The beetles are most commonly observed in spruce populations above 9,000 feet in elevation.

During low population times, the beetles usually infest downed trees only. When the beetle population in downed trees increases, usually following an avalanche or a wind event that blows down many trees, the beetles will move to standing trees.

The beetles prefer mature and over-mature trees, usually those over 16 inches in diameter. When there is an epidemic, the beetles will move to younger trees; those as small as 3 inches in diameter.

Every year, the U.S. Forest Service (USFS) and the Colorado State Forest Service (CSFS) conduct aerial surveys to monitor the damage to our spruce forests. The 2016 survey revealed the beetle affected 350,000 new acres. Since 1996, these spruce beetles have killed off 1.7 million acres throughout the state.

To date, 237,000 acres of the San Juan National Forest have been decimated. That represents about 12.6 percent of the forestlands. The Weminuche Wilderness area has been especially hard hit. This area is special

to me because I spent my honeymoon there with my bride.

As if the spruce beetle were not enough, there is a second beetle. The mountain pine beetle attacks lodgepole, ponderosa, scotch and limber pines, and is responsible for 3.4 million acres of dead trees in Colorado.

The pine beetle epidemic began in 1996 and peaked in 2008, slowly tapering off because they ran out of mature trees to infest. The good news is that USFS and CSFS agree that the mountain pine beetle epidemic is over, with population levels returning to normal. They sure left a nasty mark on our state before making their exodus.

The beetles thrive on our drought-stricken forests, and further drought will only lead to another epidemic. Climate models indicate Colorado has warmed 2 degrees in the last 30 years and is predicted to warm as much as 6.5 degrees by 2050.

According to the CSFS, there has been a 30-percent increase in dead trees over the last seven years. That translates to 834 million dead trees, or about 1 in 14 in the entire state.

All these dead trees create a number of problems. The greatest risk is that of forest fires. With the drought well entrenched, add lots of fuel to the mix, and we have the potential for a perfect storm type of disaster. Fires impact our atmosphere, public safety, wildlife and recreation.

Several hundred million tons of carbon will be released into the atmosphere as the dead timber decays or burns from a wildfire. This will contribute to further climate change. It demonstrates why logging of the dead trees and replanting are so important.

Some officials think prevention of beetle epidemics is the answer, while others believe it is part of a natural cycle and should be left alone. Preventative measures are cost prohibitive, reaching as much as \$50 per tree, in addition to annual treatments that may be needed.

There is some use for the beetle kill timber. Summit County, Colorado, has begun combining the wood chips from beetle kill trees with other organic materials to make mulch that can be used in landscaping.

Beetle kill wood is also being used in construction. Some is cut into tongue and groove siding, similar to aspen. The beetle kill wood has a blue stain in it that is caused by a fungus carried by the beetle. The stain and the beautiful grain make for an attractive ceiling or walls. We have done several rooms in the beetle kill wood in our house, and it creates a warm ambiance in the house however, I would rather see the wood in a live tree on the mountain.

Our officials with the USFS and CSFS are working tirelessly at cleaning up the kill areas and replanting. It is an insurmountable task, as the evidence of the effort is visible to anyone who visits the forest. Piles of cut wood and clear-cut areas appear everywhere as clean-up efforts continue.

I may never actually talk to the trees in our forestlands, but I sure have an emotional and spiritual attachment to them. I hope these beetles move into extinction, taking mosquitoes and no-see-ums with them, and leave our trees alone.

*Mark Rackay is a columnist for the Montrose Daily Press and avid hunter who travels across North and South America in search of adventure and serves as a Director for the Montrose County Sheriff's Posse. For information about the Posse call 970-252-4033 (leave a message) or email [info@mcspi.org](mailto:info@mcspi.org)*



(Top) This spruce was killed by beetles as are many on our forest lands. (Above) These are healthy spruce trees, located in the Uncompahgre National Forest. Hopefully the beetles will stay away from them. (Submitted photos/ Mark Rackay)



## FIND YOUR NEXT CAREER

## HERE!



## LOOK NO FURTHER!

From shop mechanic to registered nurse and the culinary arts to electrician, our local employment marketplace has exactly what you're looking for.

**MONTROSE**  
DAILY PRESS

[montrosepress.com/classifieds/job](http://montrosepress.com/classifieds/job)