



# Alamosa Landscapes

## Bristlecone Pines

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Did you know that the Rocky Mountain bristlecone pine (*Pinus aristata*) has a very restricted range? It is one of three species of bristlecone found in the Western United States. Its largest range is in Colorado according to the databasin.org map. It is found in the central mountains of Colorado – including the Sangre de Cristo Mountains and the San Juan Mountains surrounding the San Luis Valley -- and the northern mountains of New Mexico. There are smaller ranges in California, Nevada, and Utah.

After the Spring Fire earlier this year in the Sangre's east of Alamosa, a friend was happy that their mountain-property trees, which include bristlecones at about 10,000 feet in elevation, weren't harmed by the fire. But it left her wanting to know more about bristlecones whose name comes from the prickles on the female cones.

RM bristlecone pines often form single species krummholz (stunted, windblown trees growing near the tree line on mountains). They are usually found at altitudes between 7,000 and 13,000 feet according to Wikipedia. They grow where most other plants cannot grow – that is in rocky, windblown soil that is high in calcium and magnesium, and low in phosphorus.

Because of cold temperatures, dry soils, high winds, and short growing seasons, the trees grow very slowly. They often add only “1/100th of an inch in girth each summer and may not add any ring to their trunks during droughts,” according to Terri Cook in an article at the 5280.com website. They typically grow between 9 and 25 feet tall. The wood contains a high proportion of resin, which can more easily resist disease and insects. Also, they are known to retain their needles (which grow in bundles of five) for decades, not just for a few years as do other pines.

“The bristlecone's root system is mostly composed of highly branched, shallow roots, while a few large, branching roots provide structural support,” reports Wikipedia. “The bristlecone pine is extremely drought tolerant due to its branched shallow root system, its waxy needles, and thick needle cuticles that aid in water retention.”

Bristlecones are known for attaining great ages. A specimen of *Pinus longaeva*, located in the White Mountains of California, is 5,068 years old according to measurements by Tom Harlan of Rocky Mountain Tree-Ring Research. It is the oldest known individual tree in the world and its location hasn't been made public. Many folks have heard of Methuselah, a 4,850 year-old bristlecone in the same mountain range, that was considered the oldest until 2012 when the older tree was discovered.

RM bristlecones don't live quite so long. The oldest known one in Colorado grows on Black Mountain near Craig and has a 2,435-year tree ring record (and estimated age of 2,480 years) according to Wikipedia. Most don't live to be more than 1,500 years old.

Think you might want a bristlecone in your yard? Wikipedia reports that RM bristlecone is the most common in cultivation, "where it is an attractive, slow-growing small tree suitable for small gardens in cold climates. It is never as long-lived as in the wild, typically living less than 100 years before it succumbs to root decay in the warmer, moister conditions prevalent in most inhabited places." I know of only one in Alamosa, but don't know its age. I don't have the patience required for such a slow-growing species! I will visit them in the mountains.

In high elevations surrounding the valley you can see bristlecones along dirt roads or by hiking up rugged hillsides. Also, there is a Windy Ridge Bristlecone Pine Scenic Area about six miles from Alma (outside of Fairplay in South Park and north of Alamosa) that was established in 1964 by the US Forest Service. It "protects an unusual stand of wind-sculpted bristlecone pine trees growing at 11,700 feet," according to the colorado.com website. The oldest trees are between 800 and 1,000 years old depending upon which online source you consult. Located on the flanks of fourteener mountain Mt. Bross, it is accessible only during the summer months. For directions visit [summitpost.org/windy-ridge/585070](http://summitpost.org/windy-ridge/585070). Be aware that you may have to hike part of the way as the road washes out. Sounds like a good summer adventure to me!

If you need an easier ride, you can see specimens on the Mount Evans Scenic and Historic Byway, the highest paved road in North America.

*"While there may be no 'right' way to value a forest or a river, there is a wrong way, which is to give it no value at all. How do we decide the value of a 700-year-old tree? We need only to ask how much it would cost to make a new one, or a new river, or even a new atmosphere."* Paul Hawken