Forest Health Matters, Too!

Wildfires have brought much attention to how we're managing our forests today. However, we can't achieve effective management, either on our national forests or on your property, without considering individual tree health. In arid Arizona, ponderosa pine trees compete for limited water, light, soil, nutrients, and space. Without sufficient resources, individual trees suffer the effects of competition — the more trees there are per acre, the greater the competition.

Which Tree Was Older?

If you answered the larger tree, you're incorrect! Counting annual tree or growth rings, both trees are about the same age — 60 to 65 years old. They just grew under very different conditions. The smaller tree’s growth was stunted, as evidenced by its narrow growth rings. It grew close to numerous other trees, and competition for water, light, and nutrients was intense. The larger tree grew in an open, park-like situation with enough resources to meet its growth needs, making it healthy and vigorous.

Pick Your Poison!

Overstocked forests, or “dog-hair thickets,” will face one of two avenues for eventual demise. Dense thickets will either burn quickly in a wildfire or face a slow decline in health due to competition with other trees. As tree health declines and trees are starved of water, light, and nutrients, they become more susceptible to insects, such as pine bark beetles. Healthy trees can fight off and survive beetle infestation. This stand of trees before you was ravaged by dense tree competition, and ultimately suffered damage from bark beetles.

Thinning for Forest Health

Just like a garden, today’s dense forests must be thinned to allow remaining trees to grow to their potential. Unlike a garden, though, forest thinning is both an art and a science to achieve forest health and wildlife objectives and to be visually appealing.

Thinning and prescribed burning of crowded pines dramatically improves the health and longevity of mature ponderosa pines, and releases once-stunted trees by reducing competition and improving growing conditions.