

# The right tree + the right location

**Matching the tree species to the correct location is critical. The wrong tree for the wrong location can lead to headaches and very little success.**

Many native forests of Wyoming are in the mountains. The state's native deciduous trees, including cottonwoods, grow along waterways. Numerous native broadleaf trees grow as multi-stemmed, shrub forms. These trees look very different from the stereotypical "hardwood forest."

Ensure there is adequate space for development and homes in human-built landscapes. Native soils are often scraped back, compacted, and backfilled with soils in poor condition, exacerbating an already challenging growing environment.

Trees planted in a human-built environment must be hardier than most to handle stressors not found in native landscapes, including extreme heat and sun exposure from impervious surfaces, pollution, soil compaction, and many others.

Reasons to plant trees include aesthetics, privacy, higher property

value, or energy cost savings. Some trees offer more benefits than others, depending on where they are planted in a landscape. Wyoming is a tough place to grow a tree, but it happens naturally in native landscapes and intentionally in built environments. The following provides considerations for successfully selecting the suitable trees appropriate for the right location.

USDA hardiness zones provide insight into climate conditions for tree and plant survival. Plants are categorized by hardiness zones, and selecting a tree suitable for your zone designation or that falls into a cooler zone is important. Most of Wyoming is designated as USDA hardiness zones 3a–5b, with very few restricted areas listed as 6a. This means in some portions of the state trees and plants may sustain low temperatures to -40 degrees F. ([planthardiness.ars.usda.gov/PHZMWeb/](http://planthardiness.ars.usda.gov/PHZMWeb/))

## Planting for the future

Planting trees too close together or too near a structure is a common mistake. The result is removal or

clearance pruning that often deforms the natural tree form. For instance, a common landscape tree is the Colorado spruce (*Picea pungens*). The mature size is 50-plus feet in height and 25 to 35 feet in diameter at the base (branch spread). Trees are often planted too close to structures. Lower branches are pruned off because they touch the building or block windows. Blue spruce trees are shallow rooted. Removal of the lower limbs decrease a stable tree base and counterbalance that can increase the likelihood of blow over during high winds.

Overhead or underground utilities, including electric, gas, internet, cable, sewer, and septic systems, need identified and located prior to planting a tree. Call 811 to have the locations marked ([bit.ly/wyo-one-call](http://bit.ly/wyo-one-call)).

Wyoming has a range of soil types, from sandy to clayey soils. Unfortunately, there is not much of an organic layer and very little organic matter. Native soils are typically amended with compost and mulch to improve soil conditions. In Wyoming, soils are often alkaline, having a pH above 7.0, which can be tricky for many tree species; however, there are many species that adapt to our native soils, or we can amend the soils enough to make them suitable for the root system to establish by providing macro- and micro-nutrients.

Homeowners should consider having soil tests done to determine the soil composition and needs on their properties. Red maple for instance prefers acidic soils and may not be a good choice for alkaline soils; however, hackberry and Douglas fir



Crabapple (*Malus* spp.)

# = the highest success

tend to grow well in higher pH soils. Trees such as honey locust are adaptable to various soil conditions and do well as street trees because they also tolerate pollution.

## Diversity benefits

Species diversity in a landscape can help prevent an entire loss if disease or insect pests invade and target a particular species. Many landowners have preconceived notions about what they want their trees to look like. This might be the color of flowers and the color and shape of foliage during summer and fall. Selecting a tree based solely on appearance can be problematic as tree species diversity is often decreased.

Nursery stock availability is another component of species diversity. Purchasing local is highly encouraged, yet species diversity may be limited. Be cautious when purchasing from outside nurseries. Find out where the seed source or stock is coming from. Ensure the hardiness is appropriate and the tree is from a suitable source. Technical assistance may be necessary for large-scale native plantings or reclamation projects.

When landowners consider planting trees on a landscape scale, especially after destructive wildfires, they may want to rush to replant their forests. Consulting with a resource professional or forester is essential. They will provide guidance on selecting suitable trees post-wildfire for the most ideal locations and timing within a forest. Wyoming forests will regenerate on their own over time;

however, some high severity burn areas may need replanted.

Planting pioneer species sourced through a credible nursery and grown for the correct hardiness zone is important. Some locations and soils may become sterile or hydrophobic in high-severity burn areas, and trees will struggle to develop and grow. Letting the landscape and forest recover for a year or two before planting trees is important. With the tough climate, low precipitation totals, and disturbed landscape, regeneration can be difficult in some cases.

Selecting the right tree for the right place is the most important for the tree's long-term success. Follow the provided information to ensure you make the best decisions to reap the most benefits. If interested in

learning more, check out this previous article from Barnyards and Backyards, [bit.ly/bb-right-tree](https://bit.ly/bb-right-tree).

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Scotch pine (*Pinus sylvestris*)

T.W. van Urk, shutterstock

## Good wood

There are many often overlooked intrinsic benefits to having large trees in a landscape. Improved quality of life through reduced stress, anxiety, and mental fatigue, breaking up harsh architectural lines, and offering organic and natural shapes and soothing colors that are more appealing to the eye are all intrinsic benefits ([bit.ly/trees-for-good-health](https://bit.ly/trees-for-good-health)).

Utilitarian benefits are also important for planting trees in the right location. These include creating buffers, snow fences, windbreaks, privacy screens, food production, etc. Trees that work well for utilitarian benefits aside from food production typically include layering differing heights of conifers because they tend to have densely packed, persistent foliage that aid in the functionality of the working landscape feature.

Evergreens hold their leaves, which help provide screens and barriers to block wind and unsightly views as opposed to deciduous trees that drop their leaves in the fall and would open up space for light and wind to penetrate, negating the purpose of a buffer, wind, or privacy screen. There are benefits to planting small trees including beautification, sensory appeal, and ornamental value.