



Cultivating a great vineyard

Growing grapes is a rather new novelty to Wyoming.

There tends to be two main reasons for people to grow grapes in Wyoming: fruit production and aesthetic value. Determining your goals for growing grapes is the first step in establishing your vineyard.

Vineyard goal or objective

The major difference between fruit production and aesthetic value seems subtle, but the choice of cultivation affects fruit yield and fruit quality. Grapes grown for fruit production need to be established in a vineyard that will provide a strong trellis support, which also maximizes the exposure of

the vines and fruit to the sun, and the vines are heavily pruned annually.

Generally speaking, grapes grown for aesthetic reasons, such as covering an arbor or shading a patio, tend to focus on the landscape ambiance. The focus is not on fruit production, so the vines are cultivated in an area or growth habit that limits exposure to the sun, and the vines are typically pruned to keep out of undesirable places. In the right circumstances and effort, grape vines could fit both goals.

Selecting the best site location and making proper preparations before planting increases the chance of the vines surviving and thriving in Wyoming.

Vineyard site selection

Grapevines can live for more than 30 years. Establishing the vineyard in the correct place benefits the health and longevity of the

grapes. Concepts to consider when selecting a good vineyard site are soil type and quality, local climate, topography, microclimate, and land knowledge. These influencing factors are also interconnected and related. Understanding these influencing factors and how they affect the site will aid in selecting the best possible site.

Interestingly enough, vineyards can often be established on sites considered unsuitable for any other crop.

Grapes are grown over a wide variety of soils and wide range of soil conditions. The reason grapes can be grown in a wide variety of soil types is that most soils provide good drainage and moisture holding capacity, besides the heaviest of clays such as bentonite. Well-drained soils are ideal for grapes because they provide adequate oxygen for the roots, whereas saturated soils do not.

Grapes do not require high soil fertility and can tolerate a wide range of soil pH, with neutral (pH 7) being ideal. Soil salinity is the soil quality to be most concerned about. Grapes cannot tolerate high soil salinity.

Wyoming is ideal for growing grapes because approximately 75 percent of the days are cloudless, providing valuable summer sunshine. What is not ideal for growing grapes are Wyoming's below-freezing winter temperatures, late spring and early fall freezes, and short growing season.



A newly planted Wyoming vineyard

doesn't happen by accident

To generalize the other influencing factors for Wyoming, ideal locations would be southern facing or exposure (slope aspect or proximity to structures), protection from prevailing winds, and managing microclimates to the vineyards benefit. Please refer to the *Wyoming Grape Guide* B-1341 (bit.ly/WY-grape-guide) for more detailed understanding of the above topics.

Vineyard establishment

Grapevines are a creeping perennial vine that need support to grow vertically. Growing grapes on a 5-foot to 6-foot trellis or other support structure can help prevent vine damage caused by Wyoming's severe winters. Since grapes are perennial, any modifications to the site location and microclimate should be done prior to planting to prevent poor establishment or death of vines due to physical damage during installation of the vineyard or accidentally sprayed by a harmful pesticide.

Modifications to the site may include things like installing waterlines for the irrigation system, removing trees, bushes and other vegetation, amending the soil, controlling weeds, installing a trellis system, and fencing.

For most situations, especially large vineyards, creating a detailed plan to prioritize the order of how parts of the vineyard are installed can make the work more efficient and keep different parts from overstepping

each other. Below is an example of a work plan. This can be modified to fit your specific vineyard:

1. Mow all vegetation at the site.
2. Dig holes for the trellis posts and grapevines.
3. Install trellis posts.
4. Install landscaping fabric the length of the trellis row (if desired).
5. Install trellis wire.
6. Trench-in the irrigation trunk line and install laterals for all trellis rows.
7. Install the perimeter fence and gate.
8. Burn holes in landscaping fabric for planting the grapevines.
9. Install one drip emitter off of the lateral line for each grapevine.
10. Test irrigation system and hydrate ground to a moist

condition prior to planting (if needed).

11. Pull or spray weeds.
12. Plant grapevines and irrigate immediately after planting.

Many of these principles apply even if only a few vines are planted for aesthetic reasons. No matter the purpose of the grapevines, providing a robust enough trellis or structure to support the weight of a mature grapevine is important. Grapevines can get rather heavy with a full canopy of vegetation and could produce 20 to 40 pounds of fruit per vine.

Once the vineyard support structures are installed, plant those vines and start cultivating your dreams.

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A Wyoming vineyard



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