

The Differences Between Mountain and Valley Wines, Explained

BY STACY BRISCOE • Published on June 15, 2021

“Napa Valley is a wine region with incredible diversity,” says Rebekah Wineburg, viticulturist and winemaker for Quintessa, in Napa’s Rutherford American Viticultural Area (AVA). “Looking at differences between mountain and valley AVAs is a good start to understanding that diversity.”

Elevation is the most obvious influence on wines made from grapes grown in these areas. It also impacts factors like fog, topography, soil type and diurnal range, or difference in day and night temperatures.

The most obvious ways mountain wines announce themselves in the glass is by mouthfeel and tannin texture, Wineburg says.

“As a gross generalization, mountain tannins are tighter, stronger, with a lot of length and need more time in barrel and bottle to develop,” she says. “Valley floor tannins are plush, dense, but without the length.”

The Differences Between High- and Low-Elevation Wine

For Alan Viader, the distinction between mountain and valley wines comes down to concentration of aroma and flavor. He’s the director of operations and winemaking at Viader Vineyards & Winery, located at the foothills of Napa’s Howell Mountain. Vines grow on a steep 32% incline from 480 to 1,200 feet above sea level in soils low in nutrients and moisture.

As a result, these vines need to dig deep to find water. Their berries ripen slower, which produces smaller, more concentrated grapes that create intense aromas and flavors.

High altitudes can also have moderate temperatures, though conditions tend to get cooler with elevation. In Napa, vines above the fog line with more regular sun exposure can experience less range in temperature between day and night.

“We don’t get the extreme highs or lows you would experience on the valley floor,” says Viader.

These conditions affect the grapes and wine in different ways.

“Moderate temperatures...help stretch the growing season and allow fruit to ripen at a slow, steady pace,” says Laura Deyermond, viticulturist and winemaker at Newton Vineyard, which has estate vineyards in Spring Mountain and Mount Veeder AVAs.

Slower skin development and sugar accumulation in mountainous AVAs produce grapes with “classic berry aromas,” says Deyermond, often along with deeper color and firmer tannic structure. All can help develop ageability.

While hillside soils are predominantly rocky, “soils across the valley floor are actually quite variable,” says John Ruel, CEO of Trefethen Family Vineyards in Napa’s Oak Knoll AVA.

“Vines planted on vigorous soils need more canopy management to dial back the vigor,” he says.

Trefethen’s piece of Napa Valley floor has a mixture of soils, which Ruel says helps promote diversity in his wine program.

“Areas with high gravel content are well-drained, thus suited to Cabernet Sauvignon in particular,” he says. “Areas with richer soil are better suited to varieties like Merlot and Chardonnay.”



Trefethen Family Vineyards / Photo courtesy Trefethen

Where Trefethen’s topography is predominantly flat, Quintessa has rolling landscapes that provide “both mountain and valley characteristics,” says Wineburg. “The eastern hills with white-ash soils produce wines with floral character, red fruit and a distinctive length and fine-chalk texture to the tannins. The central and western hills with mixed volcanic and sandy soils produce wines with deep red and black fruit and concentrated, supple tannins.”

In the end, quality grapes and world-class wines come down to good viticultural practices and vine balance, which can mean different things due to environmental influences.

“Great wine can be made in the hills and on the valley floor,” says Ruel. “As long as the grower understands the site and the science.”

<https://www.winemag.com/2021/06/15/mountain-valley-wine-difference/>