

Bringing the Conversation

DOWN to EARTH

Adelaida Vineyards
& Winery's 16.5-acre
Viking Vineyard in the
Adelaida District AVA.

**PASO ROBLES' SOILS ARE
THE KEY TO ITS THRILLING
CABERNET SAUVIGNON**

**by Randy
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“Terroir,” esteemed wine writer Hugh Johnson once famously said, “is the sum of many things. . . . It need not be terrifying at all.” Even so, a surprising number of American wine professionals are still reluctant to talk about terroir out of the belief that wine quality is 1) defined more by the clarity or intensity of varietal character than by sense of place and 2) more reliant on favorable climate than favorable soils.

But for regions like Paso Robles, which is just beginning to carve out its place in the wine world— particularly thanks to its top grape, Cabernet Sauvignon—delivering varietal character with exceptional clarity or intensity is not enough: You can find examples of “typical” Cabernet Sauvignon from virtually any winegrowing region in the world.

If the question, then, is what makes Paso Robles’ Cabernet Sauvignon stand out from the rest, the answer lies in the region’s distinctive soils and topographies, which are capable of producing incredibly food-friendly wines with deep, bright, soaring aromatic profiles that are buoyantly balanced by sturdy yet rounded, textured, acid-driven structures. As a result, they’re capable of complementing everything from umami-rich seafood stews to Chinese takeout, making for a sommelier’s dream scenario: popular variety, maximal versatility.

To explore this topic, the Paso Robles CAB Collective put me in touch with seven of the region’s Cabernet Sauvignon specialists: Jeremy Weintraub, winemaker at Adelaida Vineyards & Winery; Steve Cass and Sterling Kragten, proprietor and winemaker, respectively, at Cass Winery & Vineyard; Michael Mooney, proprietor/winemaker at Chateau Margene; Austin Hope, proprietor/winemaker at Hope Family Wines; Soren Christensen, winemaker at Hearst Ranch Winery; and Anthony Yount, winemaker at Sixmilebridge Vineyards.

Winemaker Jeremy Weintraub in Adelaida Vineyards & Winery’s Viking Vineyard.



PHOTO: RANDY CAFAROSIO PHOTOGRAPHY

Exploring the Soil Types of Paso Robles

The Paso Robles AVA encompasses 11 nested AVAs that range from river bottoms and level terraces to hilly and mountainous terrain. According to the Paso Robles Wine Country Alliance website, more than 30 major soil series can be found within the appellation. Many of the top Cabernet Sauvignon sites are located in the Monterey Formation outcroppings—which date back up to 23 million years ago to the Miocene era—running through the California Coast Ranges. These properties are dominated by sedimentary rocks consisting of calcareous shales, sandstone, and mudstone.

Typical of many Paso Robles sites, there are five predominant soil series within Adelaida Vineyards & Winery's 16.5-acre Viking Vineyard in the Adelaida District AVA. The property is planted mostly to Cabernet Sauvignon and sits on a steep, south-facing mountain slope that tops 1,695 feet in elevation just 14 miles from the ocean. According to Weintraub, these soils are:

- **Calleguas:** Shallow (0–16 inches), well-drained clay loam; moderately alkaline (8.0 pH)
- **Calodo:** Shallow (10 inches), porous calcareous shale and sandstone; moderately alkaline (8.0 pH)
- **Danville:** Deeper (1–5 feet), well-drained sandy loam alluvium; slightly alkaline (7.5 pH)
- **Linne:** Weathered soft shale, sandstone, and clay loam (up to 3 feet); moderately alkaline (8.0 pH)
- **Nacimiento:** Fine, silty clay loam (up to 3 feet); moderately alkaline (8.0 pH)

The common denominator is the relatively high pH values of these soils, which have a direct impact on the acidity of the grapes and the structure of the resulting wines. They could be contrasted with, say, that of the vaunted Cabernet Sauvignon sites in the vicinity of Napa Valley's Rutherford area, which are marked by gravelly sandy loams with neutral to acidic pH (5.0–7.0).

Also in the Adelaida District, Sixmilebridge Vineyards' Cabernet Sauvignon plantings grow in Linne-Calodo series soils,



PHOTO COURTESY OF PASO ROBLES CAB COLLECTIVE

Fermenting grapes at Chateau Margene.

which, according to Yount, are “shale-based [and] very high in free lime content, with pH [values] as high as 8.5.” And on the east side of Highway 101, 70 of Cass Winery & Vineyard's 145 acres are devoted to estate-grown Cabernet Sauvignon in the Paso Robles Geneseo District AVA. They hover close to 1,000 feet in elevation in the sandy to heavier-clay alluvial soil of the Huer Huero Creek Watershed, but there are also slightly alkaline calcareous elements found in the six basic soil types within the estate.

While Hearst Ranch Winery has produced its Private Reserve Cabernet Sauvignons from an Adelaida District

AVA mountain site, its primary focus is on its Saunders Vineyard estate in the Estrella District. According to Christensen, the Saunders Vineyard ranges from “a sedimentary Monterey Formation with a generous sandy overlay at our lowest elevations to iron-rich red clay alluvial types with river-polished cobblestones in the Arbuckle (a slightly acid terrace alluvium) and Nacimiento soil series.”

At Hope Family Wines, Hope sources primarily from the Adelaida, Estrella, Creston, Geneseo, and El Pomar districts of Paso Robles, which he says generally fall in the “Nacimiento and Los Osos complex”—the latter being a deeper yet



Cass Winery & Vineyard winemaker Sterling Kragten.

well-drained sandstone/shale with a slightly acidic pH (6.0–6.5). “What’s important,” adds Hope, “is the presence of calcareous deposits, be it large outcroppings or smaller shale stones that add permeability, like vermiculite in gardening soil.”

Taking Advantage of Variability

“One thing about Paso Robles,” says Hope, “is that it isn’t flat.” Due to changes in elevation, “soil variability just within one vineyard block can be significant. A grower must always think in terms of having ‘a vineyard within a vineyard,’ especially when making planting or replanting decisions.”

Weintraub notes that the advantage of the extreme slopes and soil variability in the aforementioned Viking Vineyard is that they “induce the formation of hundreds of aromatic and flavor compounds in grapes.” He adds, “Soils may be super-thin or nonexistent at the top of slopes, but these are our distinguishing factors.” Yount agrees: “When we planned the Sixmilebridge estate in the Adelaida District, we knew the flagship would be Cabernet Sauvignon, and so we chose the rockiest sites to plant.”

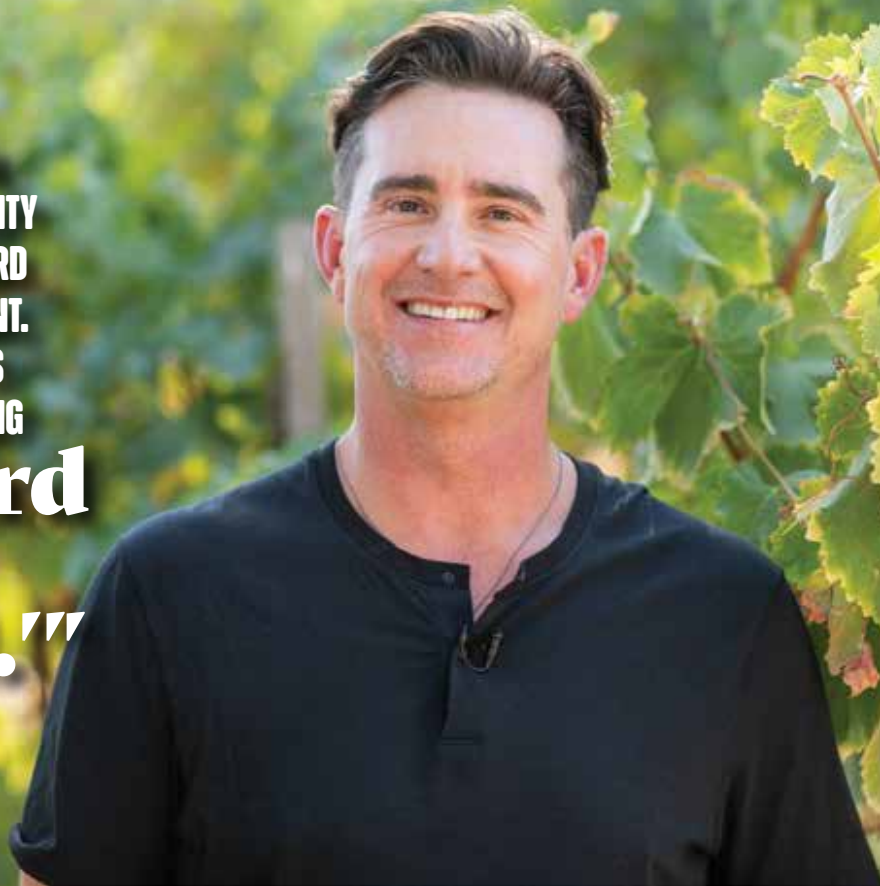
Cass, by contrast, chose to plant Cabernet Sauvignon in the heavier clay soils present on his estate because “we wanted

good water-holding capacity. Cabernet requires 2,900 hours of temperatures above 50 degrees during the growing season, which we get. Bordeaux, for instance, averages 2,900 hours, but they’ll have difficulty ripening Cabernet in the cooler years. That’s why it’s important to maintain good soil moisture.”

As for the hilly Hearst Ranch estate in the Estrella District AVA, its elevation ranges from 700 to 810 feet, though Christensen cites “the cooling wind that blows in daily from the Pacific Ocean” as an equally significant factor in planting decisions. Vine rows are oriented in an east-west direction to channel air move-

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Hope Family Wines proprietor/winemaker Austin Hope.

ment. Alluding to the region's notorious diurnal swings of 40–50 degrees Fahrenheit—generally considered to be the steepest in California—Christensen adds, "Our row orientations help the vines rest at night in preparation for another day of robust Paso Robles sunshine."

Impact on Sensory Qualities

Mooney, whose Chateau Margene estate is located in the Creston District AVA, says its "well-drained soils"—which primarily comprise clay and sandy loam as well as some sandstone and Monterey Formation shale—"allow us to deficit-irrigate, delivering ripe black fruit aromatics and flavors with rich phenolic content and well-balanced pH... We rarely need to acidulate our wines."

Paso Robles soils in general, says Hope, "can be limiting to a vine, but in a positive way. They help create a natural balance of canopy-to-fruit ratios. This type of balance is ideal because it means the vines go

through fairly easy transitions of early-season canopy growth to concentration of fruit intensity [later] in the season, resulting in high anthocyanins; soft tannins; and ripe, dark fruit characteristics that are naturally layered and complex."

Christensen, for his part, prefers to keep the alcohol levels of his Estrella District Cabernet Sauvignon around 14%: "This enables us to deliver on our promise of balance, which can be tricky in Paso Robles' warm climate. The heavy clay in some of our better sites helps vines retain just enough water to self-regulate through most of the growing season, allowing them ripen fruit at a leisurely pace, with less vulnerability to desiccation during heat waves."

Cass Winery, long known for its bright, layered style of Cabernet Sauvignon, takes full advantage of the aforementioned six soil types in its dry-riverbed estate, which is planted primarily to clones 8 and 337. Explains Kragten, "Our sandier soils help



Cass Winery & Vineyard proprietor Steve Cass in his namesake vineyard.



Sixmilebridge Vineyards winemaker Anthony Yount.

PHOTO: RANDY CAPIROSO PHOTOGRAPHY



Hearst Ranch Winery winemaker Soren Christensen.

elevate the already aromatic 337 and creates softer, well-rounded tannins, leading to lighter, elegant wines with lots of cherry. By contrast, we planted clone 8 in our heavier clay soils with some decomposed limestone, producing darker, richer Cabernets with more tannin and acid backbone. I'll blend the two, going heavier with the clone 8, to produce our Cass Reserve, adding 337 to entice the nose, whereas in our Cass Signature, it will be closer to an even split between the two clones to produce a more balanced style."

Over in the more mountainous Adlaida District, Weintraub readily explains what makes the area stand out among the subzones of Paso Robles if not California as a whole: "The high pH of our limestone soils results in wines with low pH, meaning lots of acid and structure—probably the opposite of most high-end wines grown in other regions. Our oldest vines were planted in 1991 and with that age comes not just fruit but lots of other aromatics,

like tobacco, chocolate, and potpourri. We get quite a bit of tannin from all our Viking plantings, largely because of the 1,800-foot elevation and slopes [that are] up to 30 degrees in spots. Quercetin, a type of flavonol that grapes synthesize in reaction to UV rays, is like a natural sunscreen [that] adds further to the color enhancement of our wines" by deepening pigmentation.

Yount expands on the district's many assets, noting that "the high free lime content and high elevation create expressive aromas in the Sixmilebridge wines—brightly pitched with red fruit, botanical notes, and just a hint of savory elements. On the palate they're very structural, with round tannic grip and great length from the abundant natural acidity. Compared to other Cabernet Sauvignon vineyards I've worked with in the Paso Robles area, the one distinctive quality I get in these wines is energy—a liveliness and tension with rich fruit and texture. [It all adds] up to very thrilling wines!" **SJ**