CAIN
VINEYARD & WINERY
CHRIS' TASTING GROUP

Wine and What Sets Cain Apart?

Part 1, The Vineyard

It's the vineyard, obviously. One look at the Cain Vineyard is enough for anyone, even the most experienced, most traveled wine lover to know that this place is unlike anything else. But what is it that distinguishes the Cain Vineyard? Fasten your seatbelts for a deep dive into the concept of Terroir.

THE CAIN VINEYARD, PHOTO BY FAITH ECHTERMEYER

In the New World, most attention has been given to pattern of the local *climate*. In this alone there's a lot to explore. However, in the Old World, committed vineyardists have always turned their attention to the *soil*. In fact, it is only recently that winegrowers in the New World have learned to take the soil seriously. As it turns out, both soil and local climate play essential roles in defining the terroir of the vineyard; it's the interplay of both climate and soil that can create the unique personality that defines all great vineyards.

The Soil

Because this is less obvious, let's begin with the soil. Consider that of the grapevine, we can only see half of the plant—that which is above the soil. But it is the part we can't see, the roots that are exploring the soil, which deliver the water and nutrients that the vine needs to grow. They also bring that unique combination of minerals that can define that specific site, and ultimately affect the flavors in our wine.

The first order is just to think about just how *much* water and nutrients are supplied to the vine. Obviously, if the vine has unlimited resources, it will grow tall, with large, luxuriant leaves, with many large clusters crammed with many fat berries. Happy vine. The wine is likely to be insipid. At the other extreme, if the poor vine is struggling through lack of water and nutrients, it will be scrawny, with short, spindly shoots, a few pale leaves, and even fewer scraggly clusters. Sickly vine. Unhappy wine. Finding the right balance has to do with matching the local soil with the local climate.

In a climate with rainy summers, it will be important to find well-drained soil, with limited water holding capacity. Think hillsides, with thin, rocky soils, or else gravel and sand. But with dry summers, it is important to find soils that can retain water—but not too much, so that the vines can make it through the season. Think deeper soils, more shallow slopes, more loam, and even clay.

The case of northern California is one of wet winters and dry summers—essentially almost no rain between May and October. So it's important to have enough water—but not too much. In the Napa Valley, it is easy to grow grapes on the valley floor, though the grapes may be without much character. In the hills, it's a different story. Usually, the steeper the hillside, the thinner the soil, and the rain can wash off more quickly before soaking into the soil.

In the Cain Vineyard, this finds a delicate balance. Definitely, the vines struggle, but it's important that they don't struggle *too* much. Most of the vineyard is relatively steep, and all of the steep parts are terraced, which help to capture the winter rains. Moreover, we maintain an almost permanent cover crop of grasses and legumes to keep the soil in place and to help the water to soak into the soil. What soil there *is* is comparatively shallow—two to five feet deep at most. Compare this to soil on the valley floor that might have a depth of twelve feet or more.

Because our soils are formed directly on bedrock of sandstone and shale, they are composed of a fair amount of clay, which has the has the ability to hold on to water and nutrients, and release them gradually throughout the growing season. Consider that most of the soils of the Napa Valley are of volcanic origin and you can begin to see the difference. How this can be reflected in the wine is what we want to explore.

The Local Climate

The coast of northern California is often foggy in the summer. The fog forms above the cold Pacific Ocean that runs along the coast. As I write this (the end of May) the water temperature offshore is about 50 degrees Fahrenheit (or 10 degrees Celsius). At the sea surface, the air temperature is about the same, and 100% humidity. Go inland 60 miles or up 1000 feet and the conditions can be very different. At 35 miles from the Pacific, and an elevation 1400-2100 feet, the Cain Vineyard sits exactly at the balance point between the dry inland and the cold moist coast of California.

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With global warming, and climate change, we do wonder how these conditions will evolve. But for the Cain Vineyard, it seems like it is too soon to tell. We believe that it will depend on the stability of the atmospheric high pressure over the northeast Pacific and the ocean current off the coast of California. This year, budbreak came just a bit later than usual, and as the vines approach flowering, the conditions seem almost perfect. It's a huge contrast with what has been experienced in the middle of North America and by our friends in France. All weather is local.

There is another factor which is equally interesting. In the case of a valley—like the Napa Valley—the afternoon temperatures are much warmer on the valley floor than they are up in the mountains. In the nighttime, with clear sky and relatively little wind, as the land radiates heat to the sky, cool air slips down the hillsides and fills the valley floor. This is often the case for the Napa Valley in the summertime. Conversely, the warm air of the valley rises up into the mountains. Thus at Cain, while it is generally cooler than on the valley floor, we don't experience the extremes of hot afternoons and cold mornings—rather, the temperatures tend to settle somewhere in between, and we find ourselves above the fog that fills the Napa Valley.

LA PIEDRA IN THE CAIN VINEYARD SITS ABOVE THE MORNING FOG

Clearly, grapevines enjoy a warm sunny morning, and would prefer to avoid the stress and heat of a hot afternoon. Not to say that one can't grow a good wine in cold mornings and hot afternoons, but it will be different—markedly different. Frankly, on the valley floor, the fruit will appear more ripe, but underneath it all, it will be less mature, and with less nuance and complexity.

This is just the beginning, but it's a start toward understanding what a difference a place can make. I look forward to our upcoming tastings, when we can explore the differences between our Cain Concept, grown in the benchlands of the Napa Valley, and our Cain Five, grown in the Cain Vineyard, on the western edge of the Napa Valley, at the crest of the Mayacamas.

Chris Howell

Christopher Howell, Wine-Grower